Petition

81-498

No.

Office-Supreme Court, U.S.
FILED
SEP 11 1981
ALEXANDER L. STEVAS,
CLERK

IN THE

Supreme Court of the United States

OCTOBER TERM, 1981

INTERNATIONAL HARVESTER COMPANY,
Petitioner,

v.

DEERE & COMPANY,
Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SEVENTH CIRCUIT

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La Salle Street Press — Printed in U.S.A.

QUESTION PRESENTED

Does the standard of patentable invention for a combination of old elements require that the combination produce either a new or different function, or a synergistic effect?

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OPINIONS BELOW

The Seventh Circuit Court of Appeals issued two opinions, *Deere & Co.* v. *International Harvester Co.*, No. 80-2208 (7th Cir. July 29, 1981) (A. 54); *Deere & Co.* v. *International Harvester Co.*, No. 78-2660 (7th Cir. January 23, 1980) (A. 27). The District Court issued two opinions, *Deere & Co.* v. *International Harvester Co.*, 460 F. Supp. 523 (S.D. Ill. 1978) (A. 1); *Deere & Co.* v. *International Harvester Co.*, 496 F.Supp. 397 (C.D. Ill. 1980) (A. 30).

JURISDICTION

The judgment for which review is sought was rendered and entered on July 29, 1981 (A. 81). The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

CONSTITUTIONAL AND STATUTORY PROVISIONS INVOLVED

U.S. CONST. art. I, § 8, cl. 8 (A. 83) and 35 U.S.C. § 103 (A. 83) are involved.

STATEMENT OF THE CASE

The Seventh Circuit held the patent in suit[1] valid. The Court recognized that the patent was admittedly for a combination of old elements. In holding the combination non-obvious the Court did not require either a "new or different function" or a "synergistic effect". Instead, it held that the standard of patentable invention applicable to a combination of old elements is met if the combination is an "ingenious use of ideas that makes the machine a significant advance over those previously used." (A. 70).

REASONS FOR ALLOWING THE WRIT

1. The standard of patentable invention for a combination of old elements as expressed in the decisions of this Court has been rejected by the Seventh Circuit.

2. The Circuits are in conflict on the standard of patentable invention applicable to combination patents.

3. The facts of this case are ideal for addressing the standard of patentable invention issue.

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[1] Schreiner et al, United States Patent No. 3,589,110, entitled "Gear Drive and Support for Corn-harvesting Unit".

ARGUMENT

I. The Standard Of Patentable Invention For A Combination Of Old Elements As Repeatedly Expressed In The Decisions Of This Court Has Been Rejected By The Seventh Circuit

For over 100 years this Court has uniformly required that for there to be a non-obvious invention in a combination of old elements it must produce a "new or different function".[2] A combination of old elements is patentable *only* if "the whole in some way exceeds the sum of its parts".[3] Only recently this Court reaffirmed that stringent test as requiring a "synergistic" effect or result.[4]

Over two years ago the Seventh Circuit expressly rejected both formulations of the standard of patentable invention for combination patents because in its view[5]:

> "A realistic appraisal of these formulations, however, reveals that synergism is only a figure of speech, for in its literal sense synergism never has existed and never can exist in mechanical or hydraulic inventions when the term is defined as a whole result greater than the sum of its constituent parts."

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[2] *Sakraida* v. *Ag Pro, Inc.*, 425 U.S. 273, 282 (1976); *Anderson's-Black Rock, Inc.* v. *Pavement Salvage Co., Inc.*, 396 U.S. 57, 60 (1969); *Great Atlantic & Pacific Tea Co.* v. *Supermarket Equipment Corp.*, 340 U.S. 147, 151-53 (1950); *Lincoln Engineering Co.* v. *Stewart-Warner Corp.*, 303 U.S. 545, 549 (1938); *Office Speciality Mfg. Co.* v. *Fenton Metallic Mfg. Co.*, 174 U.S. 492, 498 (1899); *Brinkerhoff* v. *Aloe*, 146 U.S. 515, 516 (1892); *Burt* v. *Evory*, 133 U.S. 349, 359 (1890); *Pickering* v. *McCullough*, 104 U.S. 310, 318 (1881); *Reckendorfer* v. *Faber*, 92 U.S. 347, 357 (1875); *Hailes* v. *VanWormer*, 87 U.S. 353, 372 (1873).

[3] *Great Atlantic & Pacific Tea Co.* v. *Supermarket Equipment Corp.*, *supra* note 2, at 152.

[4] *Sakraida* v. *Ag Pro, Inc.*, *supra* note 2, at 282; *Anderson's-Black Rock, Inc.* v. *Pavement Salvage Co., Inc.*, *supra* note 2, at 61.

[5] *Republic Industries, Inc.* v. *Schlage Lock Co.*, 592 F.2d 963, 970 (7th Cir. 1979).

And the Court specifically refused to apply that test "until Congress shall otherwise legislate or the Supreme Court shall otherwise specifically hold."[6]

Neither test was employed in the instant case. Instead, that Court found patentable invention even though the combination was merely an "ingenious use of ideas in a way that makes the machine a significant advance over those previously used." (A. 70)

The test announced by the Seventh Circuit in this case simply does not comply with this Court's previous formulations. Indeed, a nearly identical test was rejected in *Brinkerhoff* v. *Aloe*[7] where this Court observed:

> "If several old devices are so put together as to produce even a better machine or instrument than was formerly in use, but each of the old devices does what it had formerly done in the instrument or machine from which it was borrowed and in the old way, without uniting with other old devices to perform any joint function, it seems that the combination is not patentable."

There is little doubt that the combination patents this Court has held invalid were in some ways better than what went before. But they did not justify a patent because this Court requires more of a combination of old elements.

Moreover, the test focuses on intangible "ideas" rather than the "elements" of the combination. In so doing the Court below not only radically departed from this Court's decisions but also created a standard that is nebulous to the point of being impossible to apply.

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[6] *Republic Industries, Inc.* v. *Schlage Lock Co.*, *supra* note 5, at 972.

[7] *Supra* note 2, at 516.

II. The Circuits Are In Conflict On The Standard of Patentable Invention Applicable To Combination Patents

Following the Seventh Circuit's decision in *Republic Industries, Inc.* v. *Schlage Lock Co.*[8] the Tenth Circuit adopted the *Republic* rationale in *Plastic Container Corp.* v. *Continental Plastics of Oklahoma, Inc.*[9] Within a year the Tenth Circuit acknowledged that *Plastic Container* had created a conflict within the Circuit itself, declined to resolve the issue, and did not follow *Republic.*[10] The Second and Third Circuits have followed *Republic.*[11] The remaining Circuits apply the standard enunciated by this Court.[12]

The Seventh, Second, and Third Circuits and one panel of the Tenth Circuit are in direct conflict with both this Court and the remaining Circuits. Patent litigation has become unpredictable. Forum shopping necessarily results. The Circuits, the bar, and the public need guidance. This case presents a ripe and significant issue in a very manageable factual context.

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[8] *Supra* note 5.

[9] 607 F.2d 885, 904-05 (10th Cir. 1979), *cert. denied* 444 U.S. 1018 (1980).

[10] *Norfin, Inc.* v. *International Business Machines Corp.*, 625 F.2d 357, 365-66 (10th Cir. 1980).

[11] *Champion Spark Plug Co.* v. *The Gyromat Corp.*, 603 F.2d 361, 372 (2d Cir. 1979), *cert. denied* 445 U.S. 916 (1980); *Rengo Co. Ltd.* v. *Molins Machine Co., Inc.*, Nos. 80-2556, 80-2557 (3d Cir. July 20, 1981).

[12] *International Telephone and Telegraph Corp.* v. *Raychem Corp.*, 538 F.2d 453, 457 (1st Cir.), *cert. denied* 429 U.S. 886 (1976); *Huron Machine Products, Inc.* v. *A. and E. Warbern, Inc.*, 615 F.2d 222, 224 (5th Cir. 1980); *Universal Electric Co.* v. *A. O. Smith Corp.*, 643 F.2d 1240, 1247-48 (6th Cir. 1981); *Reinke Mfg. Co.* v. *Sidney Mfg. Corp.*, 594 F.2d 644, 651 (8th Cir. 1979); *NDM Corp.* v. *Hayes Products, Inc.*, 641 F.2d 1274, 1280 (9th Cir. 1981); *Robintech, Inc.* v. *Chemidus Wavin, Ltd.*, 628 F.2d 142, 144-45 (D.C. Cir. 1980).

III. The Facts Of This Case Are Ideal for Addressing The Standard Of Patentable Invention Issue

As noted by the Court below, "It is not disputed that the 110 patent is a 'combination patent', that is, a patent that is made up of known elements." (A. 67) Therefore, this Court can address the appropriate standard of patentable invention without the need to resolve a dispute over whether or not this is a combination patent.

In addition, the scope of the claims is not in dispute and only three items of prior art are relied upon by petitioner (A.68-69). Thus the application of the proper standard to the claimed invention is simple and straight-forward.

Respectfully submitted,

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Appendix

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DEERE & COMPANY, Plaintiff,

v.

INTERNATIONAL HARVESTER COMPANY, Defendant.

No. RI-CIV-76-0020

United States District Court, S. D. Illinois, N. D.

Oct. 19, 1978.

DECISION AND ORDER

ROBERT D. MORGAN, Chief Judge.

Jurisdiction in this suit for patent infringement rests upon 28 U.S.C. § 1338(a).

Plaintiff, Deere & Company, is a Delaware corporation having its principal place of business in Moline, Illinois, in this district. Defendant, International Harvester Company, is a Delaware corporation having its principal place of business in Chicago, Illinois. Both parties are manufacturers of agricultural equipment.

Letters Patent No. 3,589,110 was issued June 29, 1971, upon an application by Lester Dale Schreiner and Joseph John Shindelar, to Deere, as assignee of those applicants. It is entitled "Gear Drive and Support for Corn-Harvesting Unit." The complaint alleges that defendant is infringing that patent by its manufacture and sale of its 800 series corn head. Claims 1-10, 14 and 17 are asserted.

In general terms, the patent in suit relates to a corn harvesting mechanism designed for mounting on the forward end of a combine. Such mechanisms are commonly referred to as corn heads. It describes a mechanism embody-

ing a multiplicity of side-by-side row units for the simultaneous harvesting of a multiplicity of parallel rows of corn.

Typically, the spaces intervening between adjacent row units are bridged by sheet metal gatherer points which guide the stalks of corn into the row unit as a combine, with attached corn head, is propelled through a field of corn. Each row unit consists of a pair of gatherer chains, two stripper or deck plates, and two harvesting rolls. As the combine moves through the field, the stalks of corn are guided by the gatherer points and gathering chains into and through a restricted passage between the deck plates. Simultaneously, the counter-rotating harvesting rolls pull the stalks of corn downward between the deck plates. The ears of corn are snapped from the stalk as they reach the restricted deck plate passage, after which the ears are moved rearwardly by the gathering chains into an auger device which, in turn, carries the ears of corn into the combine for processing. After the ears are snapped from the stalks, the stalks are pulled downward through the deck plates and out of the mechanism, to remain in the field.

The structure as envisioned by the patent may be briefly described as follows. Each row unit is a self-contained structure encompassing a gear housing upon which the rigid framework of the row unit is attached in cantilever fashion. That housing encloses gears which drive the entire unit, i. e., the gathering chains and the harvesting rollers. The gear housing for each row unit is the means through which such unit is incorporated into the complete corn head. The combine has a transverse beam which extends across a plurality of rows. The structure of the gear housing of each row unit is designed to be detachably secured to the main transverse beam by the use of bolts, and that structure, in turn, carries the unit framework in cantilever fashion.

A main horizontal drive shaft, which is driven by the combine, extends across a plurality of rows to simultaneously drive the number of row units which comprise the corn head.[1] The gear train of each row unit is comprised of a main drive gear rotatable relative to the main drive shaft and thereto connected by a slip clutch which protects the gear train in the event that the unit becomes clogged. The main drive gear activates other gears within the housing which drive the gathering chains and harvesting rolls by means of shafts extending through the gear housing.

Since about 1969 plaintiff has manufactured and sold its 40 Series Corn Head, hereinafter D 40. It is not claimed by the defendant that that embodiment does not exemplify the teachings of the patent in suit.

Since early 1974, defendant has manufactured and sold its 800 Series Corn Head, hereinafter IH 800, which is alleged to infringe the patent in suit.

The D 40 embraces the features and components hereinabove described. The unitary main drive shaft extends across the gross number of row units incorporated in any given corn head. The unit is so constructed that this unitary drive shaft extends through the gear housing on each row unit. The gear housings are fully enclosed. When adjustment for row width is required, it is only necessary to loosen the bolts which lock the gear housing of each row unit to the transverse beam, and then to move the whole unit to right or to left along that beam. The unitary drive shaft is so constructed that the shaft will slide through each gear housing as the unit is moved to right or left. The drive shaft then

[1] It is generally agreed that corn heads are typically comprised of from two to eight row units for the simultaneous harvesting of a like number of parallel rows of corn.

will engage the main drive gear when the gear housing is resecured upon the transverse beam in the desired position.

It must be found that there is only one distinction between the D 40 and the IH 800. The IH 800 employs a sectionalized drive shaft. A drive shaft unit is rigidly fixed into, and extended through, each gear housing unit. Sectional members in continuation of that shaft are then attached to extend the drive shaft from one row unit to the next and ultimately to achieve a continuous main drive shaft coextensive with the total width of the corn head. The IH 800 is spaceable to accommodate the row units to varying row widths by moving the whole row unit along the transverse beam. In the process, the sectionalized main drive shaft must be disassembled and then reassembled by insertion therein of shaft segments which conform in length to the row width desired.

Defendant denies infringement. Defendant also argues that the claimed invention was obvious to persons skilled in the art, in view of the prior art, and also that the claimed invention consists of a combination of old elements which produce no synergistic effect. It therefore contends that the patent should be held to be invalid.

Following a bench trial which produced a voluminous transcript and a large number of exhibits, followed by able briefing by each party and the submission by each of proposed findings of fact and conclusions of law, the cause is now before the court for decision.

The defendant contends that an essential element of the patent is what defendant terms "self-contained adjustability." It contends that the patent claims must be construed to incorporate the element of a single unitary drive shaft extending transversely across the corn head and through each gear box, with the result that adjustment for row width is attained by sliding each gear box transversely along that unitary shaft without interrupting the power

train. It contends that its IH 800 series does not infringe because it contains a segmented main drive shaft requiring disassembly of the shaft and reassembly thereof with different components, to achieve adjustment of its unit to accommodate row width.

Plaintiff's response to that contention, in effect, asserts that "self-contained adjustability" is a red herring devised by the defendant with an intent to delude the court to read into the claims an element which is not therein included.[2]

Analysis of the claims reveals that each party is right, in part. It must be found and concluded that asserted claims 4, 5, 10, 14 and 17, inclusive, are limited in the manner for which defendant contends. It must be further found and concluded that asserted claims 1 through 3, inclusive, and 6 through 9, inclusive, are not so limited.

By way of cataloging the asserted claims, claims 1, 9 and 10, inclusive, are independent claims. Claims 2 through 8, inclusive, are dependent upon claim 1. Claims 14 and 17 are dependent upon claim 10.

Claim 1 defines a corn head as above described, supported forwardly of and on a mobile combine, the combine having a transverse horizontal beam extending across a plurality of corn rows. The inventive improvement is stated to comprise the following elements:

A. A main, rotatable, horizontal drive shaft extending across a plurality of corn rows and supported on the supporting structure;

B. A plurality of corn harvesting units each comprised of:

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[2] The term does not appear in the patent. It appears, as plaintiff suggests, to have been coined by the defendant.

1. A gear housing adapted to be supported on the transverse beam in a plurality of positions transversely along the horizontal plane of the beam;

2. The gear housing having a portion with a transverse horizontal opening adapted to circumscribe the main drive shaft;

3. A forwardly projecting rigid framework affixed to the gear housing and projecting forwardly and downwardly therefrom;

4. Harvesting mechanism supported on said framework;

5. A gear train within each gear housing, including a main drive gear concentric with the main drive shaft and rotatable relative thereto;

6. The gear train terminating in drive shaft means extending externally from the housing connected to the harvesting mechanism for its operation; and

7. A clutch drivingly connecting the drive gear of each unit to the main drive shaft.[3]

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[3] Claim 1: "In a corn harvester attachment for harvesting a plurality of rows of corn and supported forwardly of and on a mobile crop-treating unit, the corn harvester having a main supporting structure including a transverse horizontal beam extending across a plurality of corn rows, the improvement comprising: a main rotatable horizontal drive shaft extending transversely across a plurality of rows and supported on the supporting structure; a plurality of crop-harvesting units, with each adapted to harvest a row of corn and with each having a gear housing adapted to be supported on the beam in any of a plurality of transverse positions along the beam whereby transverse spacing between the respective and adjacent harvesting units may be adjusted in accordance with various spacings between the rows of corn, the gear housing further having a portion with a transverse horizontal opening adapted to circumscribe the transverse drive shaft, and each harvesting unit further having a forwardly projecting rigid framework with a rear end portion fixedly attached to the gear housing

Dependent claims 2 and 3 and 6 through 8, inclusive, each add one or more further limitations to claim 1, those claims being further descriptive of the various elements of the harvesting mechanism.

Independent claim 9 substantially follows the language of claim 1, adding limitations:

1. That the gear housing have "mechanism for supporting the gear housing on the beam";

2. That each unit have a forwardly projecting rigid framework with a rear end portion fixedly attached to the gear housing "to support the framework in cantilever fashion from the rear portion of the housing"; and

3. The "harvesting mechanism supported entirely on the framework and gear housing and extending between the rear end forward portions."[4]

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and projecting forwardly and downwardly therefrom to a forward end portion; harvesting mechanism supported on the framework and extending between the rear and forward portions thereof; a gear train within each gear housing including a main drive gear concentric with the drive shaft and rotatable relative thereto, the gear train terminating in drive shaft means having drive portions external of the gear housing connected to and for operating the harvest-mechanism; and a clutch drivingly connecting the drive gear of each harvesting unit to the main drive shaft."

[4] Claim 9: "In a corn harvester attachment for harvesting a plurality of rows of corn and supported forwardly of and on a mobile crop-treating unit, the corn harvester having a main supporting structure including a transverse horizontal beam extending across a plurality of corn rows, the improvement comprising: a main rotatable horizontal drive shaft extending transversely across a plurality of rows; a plurality of crop-harvesting units, with each adapted to harvest a row of corn and with each unit having a gear housing, the latter having mechanism for supporting the gear housing on the beam in any of a plurality of transverse positions along the beam whereby transverse spacing between the respective

None of those claims can be read to require that the gear housing be transversely movable along the main drive shaft. Both claim 1 and claim 9 describe only a main, rotatable, horizontal drive shaft extending across a plurality of corn rows. Neither limits the shaft to a unitary whole, which is the hallmark of defendant's contention as to self-contained adjustability. Dependent claims 2 and 3 and 6 through 9, inclusive, contain no such limitation.[5] Adopting that concept

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and adjacent harvesting units may be adjusted in accordance with various spacings between rows of corn, the gear housing further having a portion with a transverse horizontal opening adapted to circumscribe the transverse drive shaft, each harvesting unit further having a forwardly projecting rigid framework with a rear end portion fixedly attached to the gear housing to support the framework in cantilever fashion from the rear portion of the housing, the framework projecting forwardly and downwardly from the rear portion to a forward end portion; harvesting mechanism supported entirely on the framework and gear housing and extending between the rear and forward portions; and a gear train within the gear housing including main drive gear means concentric with the drive shaft and drivingly connected therewith, the gear train having drive shaft means with drive portions external of the gear housing connected to and for operating the entire harvesting mechanism."

[5] Claim 2: "The structure as set forth in claim 1 in which the forwardly projecting rigid framework includes a pair of laterally disposed plate members that project forwardly from the gear housing and are spaced apart transversely to define a fore-and-aft extending plant passage through which stalks of the row may move and further characterized by the plate members being supported on the gear housing in cantilever fashion whereby the plate members will project forwardly and downwardly to the aforesaid forward end portion of the framework."

Claim 3: "The structure as set forth in claim 1 in which the forwardly projecting rigid framework includes a pair of elongated structural members spaced apart transversely to define a fore-and-aft extending stalk passage with each of the rigid members being

would require this court to redraft those claims to insert a limitation which is not therein contained, thus restricting all claims to the preferred embodiment of the invention as described in the specification.

In this context, defendant asserts an action by the Patent Examiner as requiring that all claims be limited in the man-

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supported in cantilever fashion at their rear ends on the gear housing."

Claim 6: "The structure as set forth in claim 1 in which each gear housing has an upper wall portion and a pair of transversely spaced side portions, and each of the rigid frameworks includes a pair of upper laterally disposed plates with rear portions of the plates overlying the gear housing and attached thereto and vertical plate portions depending from the laterally disposed plate portions and lying adjacent the sides of the gear housing and being fixed thereto."

Claim 7: "The structure as set forth in claim 1 characterized by the harvesting mechanism including a pair of forwardly extending gathering chains that is adapted to engage and move corn products rearwardly, and a pair of harvesting rolls positioned beneath the gathering chains, and the rigid framework includes a pair of laterally disposed plates positioned between the respective gathering chains and rolls and are spaced apart transversely to define a stalk passage; and the harvesting mechanism including both the rolls and the gathering chains is driven by the drive portions whereby the drive means for the harvesting mechanism and the framework supporting the harvesting mechanism are supported in and on the gear housing."

Claim 8: "The structure as set forth in claim 1 in which the drive portions include a pair of vertically disposed chain drive shafts and a pair of forwardly and downwardly projecting roll drive shafts, and the harvesting mechanism includes transversely spaced apart gathering chains having their upper ends supported on the chain drive shafts and a pair of transversely spaced fore-and-aft extending harvesting rolls positioned beneath the respective chains and drivingly connected to the roll drive shafts, and the gear train within the gear housing extends from the main drive gear to internal portions of the chain and roll drive shafts."

ner for which it contends. As originally submitted, the application which ripened into the patent in suit contained a total 21 claims. On September 2, 1970, plaintiff was advised by the Examiner that allowance was subject to an election requirement. In that communication, the Examiner characterized by the claims to be grouped as follows:

"I. Claims 1-18 drawn to a plural unit corn harvesting device, *wherein the spacing between the units may be varied, while maintaining the drive therefor;* and

"II. Claims 19-21 drawn to the structure of means for adjusting the speed of an output shaft relative to the drive shaft, independently of the speed of the drive shaft." (Emphasis supplied.)

He required a restriction between the two groups of claims. In response to that action, plaintiff elected to cancel claims 19 through 21, inclusive, and amended certain of the other group in minor particulars not responsive to the Examiner's requirements. Those amendments have no bearing on the issues in this case. Subsequently, the patent issued containing 18 claims.

Defendant relies upon the Group I language which is emphasized above. It argues that that language reveals that the Examiner considered the Group I claims to be limited to a harvesting unit having a unitary drive shaft, along which the gear housings for row units are slidable for row width adjustment. It also asserts that plaintiff acquiesced in that characterization of the invention by its failure to contest or object to such characterization.

That argument has no merit. All claims had theretofore been approved for allowance. The Examiner's characterization of the Group I claims was descriptive of the preferred embodiment described in the specification, and his action required only an election between what he deemed to be two

separate species of claims. Perhaps the most cogent refutation of the merit of defendant's position rests in the fact, as revealed by the file wrapper, that the Examiner did not require limitation of the claims consistent with his characterization.

Super Products Corp. v. D. P. Way Corp., 546 F.2d 748, 757 (7th Cir. 1976), does not support defendant's position. There the court applied the established principle that a patent claim, alone, is the measure of the invention, though the specification and the file wrapper may limit a claim or serve to resolve an ambiguity in it. So stating, the court then said that the specification and file wrapper may not be used to enlarge the monopoly of a claim.

Actually, in this context, what defendant seems to be espousing is an unwarranted expansion of the concept of file wrapper estoppel.[6]

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[6] In support of its contention that the invention is limited by the concept of "self-contained adjustability," defendant offered in evidence its exhibits numbered 60, 63, 65, 65A, 66 and 67. Each of those exhibits is an item of correspondence by an agent of plaintiff in support of a Russian patent application correspondent to the United States application. (The Russian application was one of 11 applications filed by plaintiff in various foreign countries.) At the time of trial, those exhibits were admitted in evidence, subject to plaintiff's objections that the same were not relevant.

Those documents do fairly reflect that plaintiff did state in support of its Russian application that the main goal of the invention is the facility of shifting the housing of the gear mechanism; the shifting of the housing upon the drive shaft without couplings, by contrast to the teachings of Ashton (U.S.) 940; and that adjustment requires only the shifting of the gear housing along the main drive shaft and fixing the housing to the transverse beam in its new location.

Plaintiff's citation of *In re Goodman*, 476 F.2d 1365, 1369 (Cust. & Pat. App. 1973), *In re Dulberg*, 472 F.2d 1394, 1398 (Cust. & Pat. App. 1973), and *In re Larsen*, 292 F.2d 531 (Cust. & Pat.

Claim 4 adds to the structure defined in claim 1 a limitation that the gear housing have "a central shaft opening through which the main drive shaft projects with said central opening being considerably larger than the shaft whereby axial movement of the entire gear housing may

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App. 1961), is not particularly significant to the question of relevancy. Each of those decisions held that the fact of the issuance of a foreign patent is not relevant to the issue of obviousness under the United States Act. The court in those cases recognized the variation between the foreign laws of patentability and the United States statute, and the variations as between the laws of various foreign countries.

Ellipse Corp. v. *Ford Motor Co.*, 452 F.2d 163, 169 (7th Cir. 1971), *cert. denied*, 406 U.S. 948, 92 S.Ct. 2041, 32 L.Ed.2d 337, would tend to indicate that the rule applied in the above-cited cases would govern the issue presented by these objections. In *Ellipse*, Ford contended that the patentee had admitted a limitation of its claims by statements made in correspondence which postdated the issuance of the patent in suit. The court said that the meaning which an investor attaches to his words must be determined by the language of the application, not by subsequent events. In that context, the court adhered to its earlier decision in *Universal Oil Prod. Co.* v. *Globe Oil & Refining Co.*, 137 F.2d 3, 6 (7th Cir. 1943).

Jack Winter, Inc. v. *Koratron Company, Inc.*, 375 F.Supp. 1, 25, n. 21 (N.D.Cal. 1974), does state that a patentee's appraisal of his own invention made in the prosecution of a corresponding foreign application may be relevant to the issue of scope. It is patent in that opinion that either relevancy of the evidence related to the foreign application was shown or that the evidence was produced without objection.

Plaintiff's objections to Exhibits 60, 63, 65, 65A, 66 and 67 are sustained.

Defendant also attempts to find admissions against interest by plaintiff in the file history of the unrelated application which ripened into the Jones 948 patent. The statement of the position refutes it, inasmuch as the Jones application related to an entirely different claimed invention.

occur in respect to the main drive shaft."[7] Claim 5 is expressly limited by reference to claim 4.[8]

Claim 10, and each of its dependent claims, has the stated limitation that "the gear housing further" have "transverse opening means for receiving the [drive] shaft to pass therethrough."[9]

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[7] Claim 4: "The structure as set forth in claim 1 in which the main gear has a hub portion journaled externally on the gear housing and having a central shaft opening through which the main drive shaft projects with said central opening being considerably larger than said shaft whereby axial movement of the entire gear housing may occur in respect to the main drive shaft."

[8] Claim 5: "The structure as set forth in claim 4 in which the hub projects externally of the gear housing, and the clutch includes a first part drivingly connected to the main drive shaft and a second part drivingly connected to the hub with faces of said parts being engageable to effect rotation of the main gear in response to rotation of the main drive shaft."

[9] Claim 10: "A corn harvester adapted for support on a combine having a main power source comprising: a housing structure adapted for support at its rear end on the forward end of the combine and projecting therefrom to a forward end; a transverse harvester framework extending forward of and adapted for connection to the forward end of the housing structure, the harvester framework including a transverse horizontal beam extending across a plurality of corn rows; a transverse drive shaft adjacent the beam and also extending across a plurality of corn rows; a plurality of harvesting structures adapted for simultaneous harvesting of a plurality of corn rows, each harvesting structure including a gear housing at its rear end fixedly attachable at various transverse positions on the beam and fore-and-aft extending structural elements cantilevered forwardly from the gear housing and supporting harvesting mechanism thereon, the gear housing further having transverse opening means for receiving the shaft to pass therethrough; drive mechanism within the gear housing including a gear concentric with the shaft with means interjoining the shaft and gear for effecting rotation in unison, the drive mechanism further having portions external of the housing for driving the entire harvesting mechanism of the respective harvesting structure."

The quoted limitations embodied in claims 4 and 10 compel the conclusion that each of those claims is limited to a structure in which the gear housing is transversely movable along a single unitary drive shaft without interruption of the power train. Whatever the semantic merits of defendant's term "self-contained adjustability," that term would seem to be accurately descriptive of the limitations in those claims and in the limitations in dependent claims 5, 14 and 17, inclusive. It must further be found and concluded that claims 1 through 3, inclusive, and 6 through 9, inclusive, if the same be valid, are infringed.

The complaint prays treble damages and attorneys' fees under 35 U.S.C. §§ 284, 285, for wilful infringement. In advance of formal findings of fact, certain narrative comments upon the evidence related to that issue are considered worthwhile.

Prior to plaintiff's introduction of its D 40 corn heads, defendant had inaugurated a program to attempt to design a new corn head to overcome problems which had haunted defendant and others in the industry. No purpose is served by fully delineating the transcript in that regard, except to note that its program had achieved substantially nothing by the end of the year 1969.

Representatives of the defendant saw the D 40 on display, together with a cutaway exhibit of the gear housing and the gear train. Thereafter, one of the defendant's engineers went to the plaintiff's premises and made numerous sketches of the unit, including the power train elements. At a later date, he returned and made more detailed sketches.

The drawings and specifications for the IH 800 culminated from those sketches. Shortly before defendant began production of the IH 800, it sought the opinion of patent attorneys whether its proposed production model would

infringe the patent in suit. Its testimony was that it was advised that the unit would infringe if produced with a single unitary drive shaft. Defendant then adopted the segmented shaft, a structure which was old in the art, in an attempt to avoid infringement.

Significantly, also, defendant distributed a sales film promoting its IH 800, which showed its production model with the sectionalized shaft in operation. Defendant's management withdrew that film from use in March, 1976, responsive to a memorandum alluding to the potential of litigation by plaintiff and suggesting that a part of the sound track, if it "inadvertently" fell into plaintiff's hands, "would be all they would need to winning suit." That incident is deemed to be consistent with a finding that defendant knew that it was infringing.

FINDINGS OF FACT

1. Prior to the inventive concept here embodied, there existed numerous problems with existing corn head structures. The several components, i. e., gathering chains and harvesting rolls, were separately driven, necessitating a main drive gear and drive train for each component. The row units were of a relatively high angle, which added both excess weight to each unit and caused the units to tend to clog, especially in down corn. There was a need for a greater number of row units within a given width of the corn head. The open chain drives then used for the several components required frequent adjustment and maintenance, and they contributed to the problem of clogging. The row units in such corn heads were bulky and heavy, necessitating counterweights on combines in order to maintain steering control.

2. Beginning in 1964, Mr. Shindelar and Mr. Schreiner inaugurated a program to develop a corn head design which

would overcome those problems. Their efforts led to the application for the patent in suit and, ultimately, to the issuance of the patent. The principal effects of the concept claimed are as follows. The use of a single main drive shaft to drive the whole unit eliminated one drive gear, made it possible to employ smaller gears, and thereby permitted added compactness of the row unit. The gear housing not only housed the gears, but also served as the sole support for the row unit structure and provided the means by which the harvesting unit was attached to the transverse beam as an integral part of the total corn head. Clutch protection for each row unit was provided, which permitted the reduction in size of the drive components. The cantilevered mounting of the row unit structure upon the gear housing at the rear of the unit eliminated the need for supporting structures beneath the forwardly-extending row unit structure. The corn head sat at a substantially lower angle with relation to the combine to which it was attached. The design permitted the row unit to be more compact, shorter in overall length, narrower, and substantially reduced in weight. The removal of theretofore required support means and the reduced angle substantially decreased the problem of clogging and achieved heightened efficiency in the harvesting of down corn.

3. The D 40 series incorporates the preferred embodiment of the invention as stated in the specification of the patent in suit.

4. In about 1967, defendant inaugurated a program for the purpose of developing a corn head to supplant its then current 700 production series. By early 1969, defendant determined that a redesign of the 700 series would not suffice, but that a completely new design from the ground up would be required. The program was designed to achieve the elimination of excess framework, reduction of weight,

and elimination of the drive chains which were, at once, heavy, expensive, and difficult to maintain in proper adjustment. Nothing of moment had been accomplished by the end of the year 1969.

5. In November, 1969, defendant's chief engineer first saw the D 40 corn head. In a subsequent memorandum he characterized the D 40 as "new and rather radical." In January, 1970, Mr. Ralph Sutton, defendant's product engineer in charge of corn heads, first saw the D 40 and a cutaway model revealing the gear train at plaintiff's administrative center. After a second view of that structure, he made a rough sketch of the D 40 gear housing. His reaction to the D 40 was that it was "a hell of a good design." In February, 1970, Mr. Sutton submitted to defendant's chief engineer a memorandum containing certain design proposals for defendant's program. Those proposals included features suggested by his examination of the D 40 structure. Those proposals were eventually adopted by defendant.

6. The design of a gear housing and drive mechanisms was assigned by defendant to a project engineer in February, 1970. On February 14, 1970, that engineer went to plaintiff's administrative center and made sketches of the D 40 gear housing and drive components. He then prepared a sketch of the D 40 unit showing the relationship between the gear case, frame, and gathering components. On February 17, 1970, he again examined the D 40 display, at which time he verified his previous sketches and prepared additional sketches of the D 40 structure. At a later date, he made an engineering drawing which ultimately led to the IH 800 production series. That drawing incorporated the principal elements and design of the D 40 structure.

7. The IH 800 series was derived from the drawings made, and observations of the D 40 as displayed by plaintiff.

8. The interpretation of the several asserted claims, as hereinbefore set forth in a different context, is found to define the asserted claims and each of them.

9. Each and every element of claims 1 through 3, inclusive, and 6 through 9, inclusive, of the patent in suit is present in the IH 800 series. The sectionalized shaft performs the same function, in precisely the same way, as does the unitary main drive shaft of the D 40, and the same is a main horizontal drive shaft, not distinguishable from the drive shaft set forth in those claims. Nothing in those claims limits them to the main drive shaft remaining uninterrupted in the adjustment mode, i. e., while the row units are being adjusted to achieve any desired row spacing.

10. Claims 1 through 3, inclusive, and 6 through 9, inclusive, are infringed by the IH 800 series corn head.

11. Claims 4, 5, 10, 14 and 17 of the patent are not infringed by the IH 800 corn head. As hereinabove observed, each of those claims is limited to a unitary drive shaft, along which the gear housing may be moved transversely for adjustment of each unit to accommodate varied row widths. None of those claims can be read to include a sectionalized drive shaft, without ignoring limitations stated in the claim itself.

12. The evidence compels the finding that defendant is guilty of wilful infringement of the patent. Prior to the advent of the display of the D 40 by plaintiff, defendant's program to create a new design for a corn head had achieved nothing, except the realization that the problem required something more than the redesign of its then current production series. Within a period of a few months after defendant's engineers first saw the D 40, engineering drawings were prepared by defendant, which led to the IH 800 production series. In the interim, the engineering employee

who prepared that basic drawing had made detailed sketches of the D 40 gear housing and drive train. He incorporated the elements of the D 40 therein. By the time when design models of the IH 800 had been manufactured and tested, the patent in suit had issued. When the IH 800 had reached the stage of developing a production series, defendant sought patent counsel's opinion as to the question whether its production series did infringe the patent. Upon advice of such counsel, the segmented drive shaft was incorporated into the production series in an attempt to evade the monopoly of the patent. Segmented drive shafts had theretofore been widely used in the art. A widely distributed promotional film of the IH 800 action included a sound track which extolled the facile adjustability of the row units upon the transverse beam. The IH 800 depicted was equipped with the segmented shaft. In March, 1976, that promotional film was recalled, upon the strength of a letter by defendant's chief engineer, which stated, in effect, that litigation with plaintiff was likely and that the portion of the sound track above summarized would win plaintiff's suit if the information became available to plaintiff. In summary, the trial record permits no doubt that defendant did wilfully appropriate to its own use the teachings of the patent, in reliance upon its hope that segmenting the main drive shaft would avoid a finding of infringement.

13. Nine prior art references were cited to the Patent Office upon plaintiff's application.[10] All are before the court

[10] Those references are: Jones U.S. application No. 562,416, later issued as U.S. Patent 3,609,948; Price No. 1,390,159; Karlsson No. 3,101,579; Ashton No. 3,271,940; Hibbs No. 1,090,150; Hitchcock No. 1,936,760; Ashton No. 3,520,121; French Patents, Braud, 1,268,615 and 79,932, the latter stipulated to be identical to British Braud Patents 989,114 and 984,356, introduced in evidence by defendant.

as exhibits. In support of its defense of obviousness, defendant introduced some 22 separate references.[11] Its principal reliance was placed at trial upon the Ariens 348 Patent and the Braud parts manual and related information published by the Braud Corporation in France. The court has reviewed and compared all references submitted to it and finds that the references introduced by the defendant are the equivalent of, and no better than, the prior art references which were before the Patent Examiner. It was only by his use of a number of combinations of the asserted prior art that defendant's expert witness could state the opinion that it would have been obvious to one of ordinary skill in the art to combine such diverse elements into the structure claimed as inventive. His opinion is, of course, contested by the testimony of plaintiff's expert. The trial transcript and exhibits require a finding rejecting defendant's contention.

14. None of the asserted claims of the patent in suit are anticipated under 35 U.S.C. § 102 by any item of prior art which is before the court.

15. The prior art asserted against the asserted claims, either individually or in combination, does not render any of such claims obvious within the intendment of 35 U.S.C. § 103.

16. The asserted claims do produce a synergistic effect through the combination of their elements. Plaintiff's pro-

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[11] Ariens 2,616,348; Jones 3,609,948; Ashton 3,271,940; Ashton 3,520,121; Dort 2,647,353; Andrews 2,525,058; Thieman 2,004,711; Schwartz 3,070,939; Claas 3,201,928; Karlson 3,101,579; Dade 2,935,139; Buhr 2,758,555; Argentine Patent 96,525; British Braud 989,114; British Braud 984,356; Braud (French) parts manual and related documents; John Deere 34 corn head; Massey-Ferguson Parts Manual; IH 40 corn head; IH 41 corn picker; and advertising brochures and materials related to Ariens tillavator.

posed finding of fact that the gear housing is a new element, not an old element incorporated into the total combination, must be rejected. However, synergistic effect is achieved by reason of the fact that old elements were combined in a manner which had the effect of rewriting the book on the prior art. The gear housing is, at once, the lubricated environment for the gear train, the whole support for the row unit which extends forwardly therefrom, and it provides the sole support for the row unit as a part of the integrated corn head. The combined effect is the creation of a totally new concept. The effect was to avoid trusses or other supporting means for the row unit and to achieve lateral and vertical compactness of the unit itself.

17. White Motor Company, a competitor of both parties, has recognized the validity of the patent in suit by accepting a license under the patent.

CONCLUSIONS OF LAW

1. The court has jurisdiction of the parties and the subject matter.

2. Plaintiff is, and at all material times has been, the owner of the patent in suit.

[1] 3. Measured by legal principles hereinafter concluded, claims 1-10, 14 and 17, inclusive, of the patent in suit are, and each of them is, valid.

[2-5] 4. In determining whether an accused device infringes a valid patent, resort must be had in the first instance to the language of the claim. Infringement is proved if the accused device falls clearly within the claim. *Graver Tank & Mfg. Co., Inc.* v. *Linde Air Products Co.*, 339 U.S. 605, 607, 70 S.Ct. 854, 94 L.Ed. 1097 (1950). The accused device must be compared to the claims themselves, not to

any particular embodiment described in the specification. *CTS Corp.* v. *Piher Int'l Corp.*, 527 F.2d 95, 100 (7th Cir. 1975), *cert. denied*, 424 U.S. 978, 96 S.Ct. 1485, 47 L.Ed.2d 748. The claims of the patent measure the invention. They cannot be limited to a preferred embodiment of the invention described in the specification. *E. G., Smith* v. *Snow*, 294 U.S. 1, 16, 55 S.Ct. 279, 79 L.Ed. 721 (1935).

[6-8] 5. An accused device cannot avoid infringement by merely adding elements if the device embodies each element specified in the claims. *E.g., Temco Elec. Motor Co.* v. *Apco Mfg. Co.*, 275 U.S. 319, 48 S.Ct. 170, 72 L.Ed. 298 (1928). Nor can infringement be avoided by deliberately impairing the function of one element of the patent claim. *E. g., Technicon Instruments Corp.* v. *Coleman Instruments, Inc.*, 255 F.Supp. 630, 641 (N.D.Ill.1966), *aff'd*, 385 F.2d 391 (7th Cir. 1967). Infringement is shown when the accused device is substantially the same structure, and if it achieves substantially the same result in substantially the same way In other words, infringement is shown when the claims read upon the accused device. *E. g., Lewyt Corp.* v. *Health-Mor, Inc.*, 181 F.2d 855 (7th Cir. 1950); *Nordberg Mfg. Co.* v. *Woolery Mach. Co.*, 79 F.2d 685, 692 (7th Cir. 1935).

[9] 6. Infringement is not avoided by separating a one-piece element into several parts if the element does accomplish the same result in substantially the same way. *Crane Co.* v. *Aeroquip Corp.*, 504 F.2d 1086 (7th Cir. 1974); *Sutherland Paper Co.* v. *Auburn Carton Corp.*, 118 F.2d 862 (7th Cir. 1941).

[10-12] 7. The claims are the sole measures of the scope of the invention. *E. g., Aro Mfg. Co.* v. *Convertible Top Replacement Co., Inc.*, 365 U.S. 336, 81 S.Ct. 599, 5 L.Ed.2d 592 (1961). Neither the specification or drawings

limit the claims, *e g., Binks Mfg. Co.* v. *Ransburg Electro-Coating Corp.*, 281 F.2d 252 (7th Cir. 1960), *cert. dismissed*, 366 U.S. 211, 81 S.Ct. 1091, 6 L.Ed.2d 239, and a broad claim may not be limited by reading into it a preferred embodiment stated in the specification or limitations expressed in narrower claims. *E. g., Smith* v. *Snow, supra; Crane Co.* v. *Aeroquip Corp.*, 504 F.2d 1086 (7th Cir. 1974). A patentee is entitled to broad claims defining his invention, without limitation to a specific embodiment of it.

[13, 14] 8. File wrapper estoppel is properly invoked only when the patentee relies upon the doctrine of equivalents and the patentee has obtained allowance of the claims by amending them during prosecution of his application to avoid prior art cited by the Examiner. *E. g., Exhibit Supply Co.* v. *Ace Patents Corp.*, 315 U.S. 126, 62 S.Ct. 513, 86 L.Ed. 736 (1942); *Ellipse Corp.* v. *Ford Motor Co.*, 452 F.2d 163 (7th Cir. 1971), *cert. denied*, 396 U.S. 877, 92 S.Ct. 2041, 32 L.Ed.2d 337. The doctrine of equivalents has no application where the claims read literally upon the accused device. *Paper Converting Mach. Co.* v. *FMC Corp.*, 409 F.2d 344 (7th Cir. 1969), *cert. denied*, 396 U.S. 877, 90 S.Ct. 154, 24 L.Ed.2d 136.

[15, 16] 9. A patent is presumed to be valid by virtue of its having been issued, 35 U.S.C. 282, and that presumption can be overcome only by clear and convincing proof of invalidity. *E. g., Radio Corp. of America* v. *Radio Eng. Lab., Inc.*, 293 U.S. 1, 54 S.Ct. 752, 78 L.Ed. 1453 (1934); *Laser Alignment, Inc.* v. *Woodruff & Sons, Inc.*, 491 F.2d 866 (7th Cir. 1974), *cert. denied*, 419 U.S. 874, 95 S.Ct. 135, 42 L.Ed2d 113. That presumption cannot be overcome by reliance on prior art when reliance is placed upon prior art having no greater pertinency than that which the Examiner rejected in his allowance of the patent. *E. g., LaSalle Street Press, Inc.* v. *McCormick & Henderson, Inc.*, 445 F.2d 84

(7th Cir. 1971); *Uarco, Inc.* v. *Moore Business Forms, Inc.*, 440 F.2d 580 (7th Cir. 1971), *cert. denied*, 404 U.S. 873, 92 S.Ct. 91, 30 L.Ed.2d 117.

[17, 18] 10. A claim cannot be anticipated under 35 U.S.C. § 102 unless all elements of the claim are disclosed in a single prior art reference. *Ace Patents Corp.* v. *Exhibit Supply Corp.*, 119 F.2d 349 (7th Cir. 1941), *modified on other grounds*, 315 U.S. 126, 62 S.Ct. 513, 86 L.Ed. 736. Anticipation cannot be shown by finding the individual elements separately in prior art. *E. g., Imhaeuser* v. *Buerk*, 101 U.S. 647, 25 L.Ed. 945 (1880); *Elgen Mfg. Corp.* v. *Ventfabrics, Inc.*, 207 F.Supp. 240 (N.D.Ill.1962), *aff'd*, 314 F.2d 440 (7th Cir. 1963).

[19, 20] 11. The obviousness or non-obviousness of the subject matter depends upon a comparison of the scope and content of the prior art with the claims in suit, having reference to the level of the ordinary skill in the involved art. Secondary considerations, including, e. g., the proof of a long-felt need and the failure of others to meet that need, may bear relevantly upon the question. *Graham* v. *John Deere Co.*, 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966). The presumption of validity is strengthened by evidence of a long-felt need in the art, *e. g., Ekco Products Co., Inc.* v. *Chicago Metallic Mfg. Co.*, 321 F.2d 550 (7th Cir. 1963), by the failure of others in the art to conceive the invention shown, *e. g., Illinois Tool Works, Inc.* v. *Sweetheart Plastics, Inc.*, 436 F.2d 1180 (7th Cir. 1971), *cert. dismissed*, 403 U.S. 942, 91 S.Ct. 2270, 29 L.Ed.2d 722; *Devex Corp.* v. *General Motors Corp.*, 321 F.2d 234 (7th Cir. 1963), and by the defendant's copying of the invention and its praise of the invention through advertising its accused product. *E. g., Ingersoll-Rand Co.* v. *Brunner & Lay, Inc.*, 474 F.2d 491 (5th Cir. 1973), *cert. denied*, 414 U.S. 865, 94 S.Ct. 125, 38 L.Ed.2d 117; *Chicago Lock Co.* v. *Tratsch*, 72 F.2d 482 (7th

Cir. 1934). Defendant's reliance upon a large number of prior art references is itself an indication that the invention was not obvious. *Minneapolis-Honeywell Regulator Co.* v. *Midwestern Instruments, Inc.*, 298 F.2d 36 (7th Cir. 1961); *Ric-Wil Co.* v. *E. B. Kaiser Co.*, 179 F.2d 401 (7th Cir. 1950).

[21, 22] 12. A combination patent is not valid unless the combination of elements achieves a synergistic effect. *E. g., St. Regis Paper Co.* v. *Bemis Co., Inc.*, 549 F.2d 833, 838 (7th Cir. 1977); *Pederson* v. *Stewart-Warner Corp.*, 536 F.2d 1179, 1181 (7th Cir. 1976). Synergistic effect is not shown simply by the fact that the combination produces a more striking result. *St. Regis Paper Co.* v. *Bemis Co., Inc., supra.* A synergistic effect is achieved when the patentee uses and arranges his materials in such fashion that the combination achieves a theretofore unknown concept in the relevant art.

13. Defendant has failed to sustain its burden of proof that the asserted claims are invalid.

[23] 14. When wilful infringement is shown, a court may award damages not exceeding treble the amount of damages proved, 35 U.S.C. § 284, and in exceptional cases, reasonable attorneys' fees. 35 U.S.C. § 285. This is an exceptional case of wilful infringement.

15. All statements within the total context of this memorandum, which partake of the character of findings of fact, are so found, and all of the same which partake of the character of conclusions of law are so concluded.[12]

16. As a matter of law, plaintiff is entitled to a judgment permanently enjoining the defendant from manufacturing,

[12] The court has considered all contentions made by the defendant and the authorities by it cited. Any such contentions which are not specifically articulated in the context of this memorandum are rejected.

using, or selling any product embodying the invention claimed in the patent in suit, 35 U.S.C. § 283; for recovery of its provable damages for prior infringement, including interest and costs, which provable damages shall be trebled; and for its reasonable attorneys' fees.

IT IS ORDERED therefore, that judgment shall enter for the plaintiff against defendant:

a. Permanently enjoining defendant from manufacturing, using, or selling any product embodying the invention claimed in the patent in suit;

b. For its provable damages for prior infringement, including interest and costs, which said provable damages are trebled;

c. For its reasonable attorneys' fees and its costs of suit.

The cause shall remain pending for determination of the issue of the amount of damages and the amount of plaintiff's reasonable attorneys' fees, by a subsequent trial of those issues to be set by the court.

UNITED STATES COURT OF APPEALS

For the Seventh Circuit

Chicago, Illinois 60604

(ARGUED MAY 23, 1979)

January 23, 1980.

Before

Hon. PHILIP W. TONE, Circuit Judge

Hon. ROBERT L. KUNZIG, Judge*

Hon. WILLIAM J. BAUER, Circuit Judge

DEERE & COMPANY, *Plaintiff-Appellee,* No. 78-2660 vs. INTERNATIONAL HARVESTER COMPANY, *Defendant-Appellant.*	Appeal from the United States District Court for the Southern District of Illinois, Rock Island Division. No. 76-C-20 Robert D. Morgan, Judge

ORDER

The defendant-appellant International Harvester Company appeals from the order of the district court granting judgment in favor of the plaintiff-appellee Deere & Company on Deere's complaint for infringement of its U.S. Patent No. 3,589,110 covering the invention of corn harvesting machinery. The district court held the Deere patent valid and found International Harvester liable for wilful infringement. We conclude that the district court erred in its determination of the validity of the Deere patent within the meaning of 35 U.S.C. § 103 and the analysis required

* The Hon. Robert L. Kunzig, Judge of the United States Court of Claims, is sitting by designation.

under *Graham* v. *John Deere & Co.*, 383 U.S. 1 (1966). Accordingly, we reverse the judgment appealed from and remand the cause to the district court for further proceedings not inconsistent with the views expressed herein.

The issuance of letters patent creates a presumption of validity and the burden of establishing invalidity rests with the party asserting it. 35 U.S.C. § 282. However, this statutory presumption of validity does not exist as against prior art which was not considered by the Patent Office at the time the patent granted. *Allen Group* v. *NuStar, Inc.*, 575 F.2d 146 (7th Cir. 1978) (per curiam). In support of its defense of obviousness, International Harvester submitted to the district court 22 separate references to prior art not cited to the Patent Office upon Deere's application for the patent, and contended that the presumption of validity should not apply to the patent in suit. The district court found that the prior art relied on by International Harvester was the equivalent of, or no better than, the prior art references that were before the Patent Office. Although the district court's findings of fact will not be set aside on appeal unless clearly erroneous, the failure of the district court to articulate more adequately its rationale for this finding in light of standards set forth in *Graham* precludes proper appellate review of the issue of the validity of the Deere patent.

The Patent Act of 1952 provides that patentability is dependent upon three explicit conditions: novelty, utility, and non-obviousness. 35 U.S.C. §§ 101, 102, and 103, respectively. Section 103 of the Act provides, in pertinent part:

> § 103. *Conditions for patentability; non-obvious subject matter*
>
> A patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the inven-

> tion was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

35 U.S.C. § 103. In *Graham* v. *John Deere & Co.*, 383 U.S. 1 (1966), the Supreme Court delineated the analysis required in evaluating a patent for obviousness under Section 103:

> While the ultimate question of patent validity is one of law [citation omitted], the § 103 condition, which is but one of three conditions, each of which must be satisfied, lends itself to several basic factual inquiries. Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent are resolved.

Id. at 17. The *Graham* analysis is "the exclusive means by which to measure nonobviousness under section 103." *Republic Industries* v. *Schlage Lock Co.*, 592 F.2d 963, 972 (7th Cir. 1979). On remand, therefore, the district court is instructed to make detailed findings of the following in conformity with *Graham*:

> 1. The state of the prior art with reference to each of the several old elements that were combined to constitute the invention claimed in the Deere patent.
>
> 2. With respect to each of those elements, a comparison of the "equivalent" prior art cited to the Examiner with prior art not cited.
>
> 3. The level of skill in the art.
>
> 4. The reasons why the evidence shows the patented combination of the above elements would not have been obvious to one skilled in the art.

For the foregoing reasons the judgment appealed from is reversed, the cause remanded, the Clerk of this Court is directed to enter judgment accordingly.

REVERSED AND REMANDED.

DEERE & COMPANY, Plaintiff,

v.

INTERNATIONAL HARVESTER COMPANY, Defendant.

No. RI-CIV-76-0020.

United States District Court, C. D. Illinois.

July 10, 1980.

SUPPLEMENTAL FINDINGS AND ORDERS

ROBERT D. MORGAN, Chief Judge.

This suit by Deere against International Harvester for patent infringement is now before the court pursuant to an order of remand entered by the Court of Appeals for the Seventh Circuit. The matter seems placed in sound perspective by the following chronological statement.

The cause was tried before the court without a jury. On October 18, 1978, this court filed its decision and entered its judgment holding asserted claims 1-10, inclusive, 14 and 17 of the patent in suit[1] to be valid, and holding asserted claims 1-3, inclusive, and 6-9, inclusive, to be infringed by IH's accused device. *Deere & Co.* v. *International Harvester Co.*, 460 F.Supp. 523 (S.D.Ill.1978).

Nine prior art references were cited by the patent examiner upon his processing the application for the patent.[2] To support its defense assertion that the combination embodied in the claims would have been obvious to persons

[1] Schreiner, et al., Patent No. 3,589,110.

[2] Note 10, *infra*.

having ordinary skill in the art to which the subject matter pertained at the time when the claimed invention was made (35 U.S.C. § 103), IH introduced in evidence some 22 prior art references, including 17 references which had not been cited by the patent examiner.[3] On such defense of obviousness, this court found that the uncited prior art references were the equivalent of, and no better than, those references which had been cited by the patent examiner. The defense was rejected by the simple statement of an ultimate finding that the claimed invention would not have been obvious within the intendment of Section 103.

On an appeal from that judgment, the Court of Appeals, by an unpublished order,[4] decided that the failure of this court "to articulate more adequately its rationale" for that ultimate finding of non-obviousness, "in light of the standards set forth in" *Graham* v. *John Deere Co.*, 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966), precluded "proper appellate review of the issue of the validity of the Deere patent." That order reversed the judgment and remanded the cause with specific instructions to this court "to make detailed findings of the following in conformity with Graham":

"1. The state of the prior art with reference to each of the several old elements that were combined to constitute the invention claimed in the Deere patent.

"2. With respect to each of those elements, a comparison of the 'equivalent' prior art cited to the Examiner with prior art not cited.

"3. The level of skill in the art.

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[3] Note 11, *infra*.

[4] *Deere* v. *Int. Harv.*, 618 F.2d 110, 7th Cir. 1980.

"4. The reasons why the evidence shows the patented combination of the above elements would not have been obvious to one skilled in the art."

Thus, this court is directed to make supplemental findings of fact related to each of the above areas of inquiry, and herein undertakes to do precisely that.

This court convened an informal conference with counsel shortly after January 23, 1980, at a time before the record on remand had been returned to this court, to discuss the content and purport of the remand order. At that time it was suggested to counsel that the remand order basically required supplementation of the original decision by the framing of supplemental findings of fact. Deere was requested to prepare and submit to the court its proposals for supplemental findings responsive to the command of the remand order, with IH to submit its response to such proposals after the receipt of same. IH did suggest at that time that it contemplated the filing of other responsive material, including a motion to reopen the evidentiary record to permit IH to adduce further evidence.

Deere's proposals were filed following the return of the trial record to this court. Thereafter, IH filed a response and, also, a supplemental brief related to the question of validity, as well as its motion to reopen the trial record to permit it to introduce "new" evidence which was asserted to relate to the issue of validity.

A hearing on that motion and a post-remand conference were held on May 16, 1980. At that time, the IH motion to reopen the trial was denied, and counsel were advised that the argumentative bases of IH's supplemental brief were largely rejected by the court as being not consistent with the further proceedings which the remand order is deemed to require. For perspective only, a brief summary statement

as to each the IH supplemental brief and motion to reopen follows.

By its supplemental brief, IH sought to disavow all of its uncited prior art references, except the Braud publications,[5] the Dort patent,[6] and the Schwartz patent.[7] IH asserted the position that it does not contest the validity of claim 10 and its dependent claims, in view of this court's original determination that IH's accused device did not infringe such claims. IH further asserted that this court's original construction of the patent claims, plus its finding that claim 10 and certain other claims were not infringed, rendered its prior art references, other than those above specifically mentioned, unnecessary to support its position.

Although adoption of that suggested course would simplify disposition, the mandate of the Court of Appeals cannot be limited to permit that course. Also, IH's position in that regard presumes a reliance upon the original judgment, notwithstanding the fact that that judgment has been reversed and the same now has no force and effect. It seems necessary to evaluate all uncited prior art in evidence in the light of the *Graham* criteria for obviousness.

The motion by IH to reopen the trial record rests upon its claimed need to introduce "new" evidence which is said to have a relevant bearing upon the issue of validity. Its assertion as to "new" evidence is said to find a basis in two contexts, namely, Deere's dealings with White Motor Company and a declaratory judgment suit filed by IH against Deere in this court while the appeal was pending in the instant cause. *International Harvester Co.* v. *Deere & Company*, 478 F.Supp. 411 (C.D.Ill.1979).

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[5] DX 1.

[6] DX 24.

[7] DX 27.

The precise contention of IH must be articulated with reference to that declaratory judgment action. IH prayed a declaration that a production model corn head being developed by it when its complaint was filed did not infringe the claims of the subject patent. In its original decision in this cause, this court construed the claims to be limited in scope to the employment of a single drive gear and a single integrated drive train for all elements of each corn head row unit. The IH production model, which was the subject of the declaratory judgment, employed four drive gears and four attendant drive trains. Because of that distinction, this court found and declared that the IH production model did not infringe the patent here in suit.[8]

IH recites the factual basis for that complaint as reflecting that Deere asserts a scope for its claims which is broader than the scope asserted by it in this cause in support of the validity of the patent. It also relies upon evidence, assertedly discovered in the course of discovery in the declaratory judgment action, which it deems to show that Deere had asserted a similar and inconsistent scope to the claims against White, both before and after the trial in this cause.[9]

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[8] On June 12, 1980, the Court of Appeals reversed the IH declaratory judgment, that court holding that there was no justiciable controversy and, thus, no subject-matter jurisdiction. That decision rested in part upon the fact that the instant cause is pending, unresolved, and there is no final decision upon the issue of the validity of the patent. *International Harvester Co.* v. *Deere & Co.*, 623 F.2d 1207, 7th Cir. 1980.

[9] White, an agricultural equipment manufacturer, negotiated a license agreement with Deere for White's practice of the teachings of the patent in suit and two other Deere patents. The White license agreement was introduced in evidence in the trial of this cause as PX 59. Accepting such discovery deposition testimony at face value, it appears that Deere's technical expert testified that neither the White corn head nor the proposed IH model, both of

The motion to reopen the evidentiary record was denied because of the court's view that such course was neither commanded by the remand order nor appropriate to the further proceedings in this cause which that order requires. It is noted also that the circumstances attendant upon Deere's dealings with White might have been evidentially developed in the trial of this cause. The White license was in evidence. IH was aware of an equivocal statement by Deere that it considered the White corn head to embody the teachings of the patent in suit. IH was then in a position to have advised itself as to the structural details of the White unit even if it, in fact, then lacked that specific knowledge. The proffered evidence is deemed to bear upon prospective claims by Deere of infringement and, potentially, upon any prospective assertion of the abuse by Deere of its position under the patent.

After the Court of Appeals reversed the declaratory judgment, IH filed a motion for reconsideration of the denial of its motion to reopen the evidentiary record. That motion was denied by a written order of June 19, 1980. Finally, IH also filed a supplemental brief on the scope of the claims, which largely reasserts its position based upon the White circumstances and the declaratory judgment action.

This court's prior decision made findings of fact and stated conclusions of law pertinent to all issues presented upon the trial of the cause. The reversal was limited to the found inadequacy of the findings of fact which related to the issue of obviousness. Thus, the merits of that prior decision are affected only in the context of the obviousness findings.

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which employ four drive trains, literally infringes the claim of the patent in suit. He did state the opinion, however, that equivalence did exist between the IH unit and the patent claims.

There are two matters which are not directly related to the obviousness issue which do require correction.

First, the court's attention is now directed to an insignificant misstatement of fact contained in original numerical finding 12. That finding attributes the authorship of a document to IH's chief engineer. In fact, the author of that document was IH's market planning manager, although it is also the fact that his production of the document was directly responsive to a memorandum to him from IH's chief engineer. Although the substance of that finding is not affected, that inadvertent misstatement is corrected.

Second, conclusion of law number 12 in the original decision has been rendered erroneous by intervening events. In reliance upon *St. Regis Paper Co.* v. *Bemis Co., Inc.*, 549 F.2d 833, 838 (7th Cir. 1977), and other precedents, it was stated in that conclusion that, "A combination patent is not valid unless the combination of elements achieves a synergistic effect." That legal premise was rejected as a criterion for determining obviousness in *Republic Industries, Inc.* v. *Schlage Lock Co.*, 592 F.2d 963, 967-972 (7th Cir. 1979). Thus, conclusion of law number 12 has now become an erroneous statement of the law and the same is disavowed.

Having considered all arguments and all materials submitted by the parties, and having fully reexamined and reevaluated the prior art references in evidence, the court concludes that the original judgmen was in all respects correct. Consistently with that conclusion, the following supplemental findings of fact are made and the prior decision is reaffirmed as here supplemented.

SUPPLEMENTAL FINDINGS OF FACT

Orderly presentation with maximum clarity of the relationships between the evidence and the findings, with minimum repetition, suggests some combination and rearrangement of the Court of Appeals specifications for findings numbered 1, 2, and 3, leading to the final number 4, being precisely the reasons why the evidence shows the patented combination of elements would not have been obvious to one skilled in the art.

1. *THE ART AND THE LEVEL OF SKILL IN THE ART*

a. The pertinent are involved is the art of agricultural equipment design, and specifically, the engineering design of mechanisms for the mechanical harvesting of corn.

b. The credentials of the several technical experts who testified for the respective parties at the trial are deemed to disclose the level of the ordinary skill in the pertinent art at the time when the claimed invention was made. That level of skill was the technical skill possessed by persons who had an educational background in mechanical engineering or agricultural equipment engineering, and at least several years of experience in the engineering design of corn harvesting equipment.

2. *SCOPE AND CONTENT OF THE PRIOR ART AND DIFFERENCES BETWEEN THE PRIOR ART AND THE CLAIMS ASSERTED*

c. IH's principal contention on the question of validity is that by combining various prior art references, the patented corn head could have been created, and that such combinations of prior art would have been obvious to a person hav-

ing ordinary skill in the art at the time the invention was made.

d. Nine prior art references were before the Patent Office upon Deere's application.[10] All are before the court as exhibits. In support of its defense of obviousness, IH relied upon certain references which were before the Patent Office and introduced some 17 additional references.[11] Its principal reliance was placed at trial upon the Ariens 348 patent and the Braud parts manual and related information published by the Braud Corporation in France. The court has reviewed and compared all references submitted to it and finds that the references introduced by IH are the equivalent of, and no better than, the prior art references which were before the Patent Examiner. It was only by his use of a number of combinations of the asserted prior art that IH's expert witness could state the opinion that it would have been obvious to one of ordinary skill in the art to combine such diverse elements into the structure claimed as inventive.

e. The evidence discloses that no single prior are reference contains all of the elements of the claimed invention.

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[10] Those references are: Jones U.S. application No. 562,416, later issued as U.S. Patent 3,609,948; Price No. 1,390,159; Karlsson No. 3,101,579; Ashton No. 3,271,940; Hibbs No. 1,090,150; Hitchcock No. 1,936,760; Ashton No. 3,520,121; French Patents, Braud, 1,268,615 and 79,932, the latter stipulated to be identical to British Braud Patents 989,114 and 984,356, introduced in evidence by defendant.

[11] Ariens 2,616,348; Dort 2,647,353; Andrews 2,525,058; Thieman 2,004,711; Schwartz 3,070,939; Claas 3,201,928; Dede 2,935,139; Buhr 2,758,555; Argentine Patent 96,525; British Braud 989,114; British Braud 984,356; Braud (French) parts manual and related documents; John Deere 34 Corn Head; Massey-Ferguson Parts Manual; IH 40 Corn Head; IH 24 Corn Picker; and advertising brochures and materials related to Ariens Tillivator.

Although IH's expert did at one point testify that in his opinion all of the elements of claim 9 could be found in a diagram he had prepared from the Braud parts catalog, that testimony was controverted by plaintiff's expert. The court finds the testimony of Deere's expert more convincing, particularly after having independently examined the prior art. As will be pointed out in the findings that follow, the Braud references fail to disclose or suggest important elements of the claimed invention, and although such elements may be found in isolated items of prior art, the court finds that incorporation of these elements into Braud would not have been obvious.

f. IH primarily relies upon the following prior are references to support its position that the combination would have been obvious, to-wit: U.S. patents to Ariens, Ashton 940, Jones, Dort, Schwartz, Andrews, and Thieman; Argentine patent 525; materials related to the Ariens Tillivator; the Braud parts manual and other publications; the IH 40 corn head; and the John Deere 34 corn head. Of those references, the Ashton patent was cited by the Patent Examiner, and the Jones patent was before the Examiner by virtue of the reference in the patent application to the copending Jones patent application, which later ripened into the Jones patent. The IH 40 corn head structure is shown in the Karlsson patent which was cited by the Examiner.

g. Turning now to a consideration of the teachings of the various items of prior art listed, the Braud corn harvester, as disclosed in the Braud parts manual and related documents, has row units, each including harvesting mechanism carried by a framework to which is attached a gear case through which a single drive shaft passes. The gear case encloses four gear trains for operating the harvesting mechanism, each train having a drive gear fixed to the drive shaft. Braud lacks the single gear train of the claims;

moreover, there is neither a single main input gear within the gear case coupled to the drive shaft for driving all of the harvesting elements of each row unit, nor a clutch protecting individual row units. Each row unit of the Braud corn head is pivoted at its rear end in a pair of trunnions bolted to a forwardly extending flange on the transverse auger trough. The arrangement is such that the drive shaft forms the pivot axis of the row units, and the front ends of the row units are raised and supported by hydraulic jacks connected to a horizontal beam extending transversely under the row units and attached thereto by sets of struts. In addition, lateral load-bearing struts or braces extending from the beam also serve to support the row units. Removal of the struts supporting the row units of the Braud corn head would cause the front ends of the row units to rest on the ground. Thus, the row units of the Braud corn head are not cantilevered structures, and there is no suggestion of such mounting.

h. Ariens and the advertising brochures and other materials related to the Ariens "Tillivator" are directed to a rotary cultivator intended to work the ground between rows of a standing crop. The Ariens cultivator is a multiple unit device, with each unit having a forward end pivotally supported from a drive shaft and a rear end supported on the ground during operation. Each unit has a drive sprocket connected to the drive shaft through a clutch which can slide relative to the drive shaft. The drive sprocket is connected to a rotary ground-working tool through a drive chain. IH's expert conceded that Ariens is not a corn harvesting attachment, that it does not have a gear housing, let alone a gear housing supported in cantilever fashion, and that it does not have any gears or a gear train. In addition, the chain case of Ariens is not supported on a transverse beam and does not support a forwardly projecting,

rigid framework. Ariens discloses neither a harvesting mechanism nor even the concept of driving a plurality of functional elements in each row unit with a single input to that row unit.

i. The cited Ashton 940 and the Massey-Ferguson Parts Book, which discloses parts of a commercial embodiment of the Ashton 940 patent, pertain to a corn harvester attachment having a plurality of harvesting units adjustably mounted on a main beam. Each harvesting unit is made up of an open frame assembly which is clamped to the beam and supports the drive gears, and left and right arm assemblies which are cantilevered from the open frame assembly. The frame assembly and arm assemblies support the harvesting mechanism. The gatherer chains and stalk rolls are separately driven by telescoping drive shafts and a plurality of input gears fixed to the shafts. The gatherer chain drive shaft and stalk roll drive shaft are driven by separate chains from a single dual chain sprocket connected to a third shaft through a clutch. Ashton does not disclose a gear housing, a single gear train, a main drive gear for operating the entire harvesting mechanism, a clutch for protecting each row unit, or a main drive shaft for operating the entire row unit harvesting mechanism.

j. The Jones patent, the application for which was before the Patent Office, discloses a multiple row corn head which is adjustable for row spacing. Each harvesting row unit is bolted to a pair of frame members on the front and rear of a transverse augur trough, and by removal of the bolts the units can be adjusted for row spacing. A transverse drive shaft positioned above and to the rear of the row units provides the power to the row units through a chain and sprocket drive arrangement. The drive sprocket of each row unit is connected to the drive shaft through a

slip clutch, and the drive shaft is telescopic to permit adjustment of the sprockets when adjusting for row spacing. Jones does not have a gear housing which encloses the entire drive for a row unit, a gear housing supporting the unit framework, a single main beam on which the row units are mounted, a single gear train with a main drive gear for driving all of the harvesting mechanism, or cantilever mounting of the row unit framework.

k. The IH 40 Corn Head, which is shown in the Karlsson patent cited by the Patent Office, has a plurality of harvesting units adjustable for row spacing. Each unit includes a built-up framework which supports the harvesting mechanism as well as the drive gears and sprockets for that mechanism. The rigid framework is bolted to a pair of spaced frame members on the main supporting structure. The stalk rolls are driven by a chain which extends across a plurality of rows below the units. The gatherer chains are driven by a sectionalized shaft extending across a plurality of rows. Each gatherer chain is driven by a separate bevel gear train that includes a drive gear fixed to the sectionalized shaft. When adjusting for row spacing, it is necessary to replace a section of the shaft between adjacent row units. The IH 40 does not have a main beam supporting the harvesting units, a main drive shaft for driving all of the harvesting mechanisms, a gear housing, a gear train for operating the entire harvesting mechanism, or a clutch for protecting each row unit.

l. The John Deere 34 Corn Head is similar to the IH 40 Corn Head and differs therefrom only in that the individual row units are adjustable on the gatherer chain drive shaft, whereas intermediate sections of the gatherer chain drive shaft in the IH 40 have to be replaced when adjusting row spacing. The specific feature that distinguishes the John

Deere 34 over the IH 40 is the use of bevel drive gears that are slidable on the gatherer chain drive shaft to facilitate row spacing adjustments. That feature, however, is shown in Price 1,390,159, which was cited by the Patent Office.

m. The Dort patent does not relate to a combine-mounted corn head but discloses, instead, a two-row, tractor-mounted corn picker. Thus, basic structural elements of the claimed corn head are absent, including the transverse main beam and the main drive shaft extending transversely across a plurality of rows. In Dort, each row unit has a main gear casing, but this casing does not enclose all of the harvesting unit gears. Part of the gear drive for each row unit in Dort is in a gear case separate and remote from the main gear casing. Each main gear casing is driven by its own shaft, and these shafts extend longitudinally and not transversely. Rather than being mounted on a main transverse beam, the main gear casing is secured to the forward end of a torque arm pivoted at its rear end to the tractor axle, and the drive shaft for that unit extends through the torque arm. The gear casing supports a snapping unit, a first elevator, and a husking unit. The snapping unit includes an inner gatherer subassembly which is cantilevered from the gear casing, and an outer gatherer subassembly which has a portion attached to the gear casing. That subassembly is not truly cantilevered therefrom because it is part of a built-up structure and relies upon other structural components extending forwardly and rearwardly of the gear housing for support. The Dort patent, owned by plaintiff, was embodied in an experimental machine that was not put into production because the cantilevering concept used therein did not work satisfactorily. The concept was abandoned and discouraged further development in that direction.

n. The Schwartz patent is directed to a multiple-row, non-adjustable corn head, with each row unit driven by a bevel gear fixed to a drive shaft. The drawings of the patent show that the Schwartz machine is both bulky and complex, with much of the structure situated below the row units. This patent does not disclose a gear housing; the various driven elements are not only exposed but are spread out over a considerable distance and distributed throughout the row units. Schwartz also fails to disclose row spacing adjustability, cantilevered row units, and individual row unit clutch protection.

o. Argentine patent No. 96,525 discloses a multiple row corn harvesting attachment with each harvesting unit having an enclosed gear case through which a single segmented drive shaft passes. Each gear case encloses four bevel gear trains for operating the harvesting mechanism, each gear train having a drive gear fixed to the drive shaft. This patent does not disclose a main beam, a rigid framework for supporting the harvesting mechanism, or give any indication as to how the gear housing is mounted or supported. The Argentine patent furthermore fails to disclose a single input gear for driving the entire harvesting mechanism, or a clutch providing individual row unit protection.

p. The Andrews patent pertains to a two-row, tractor-mounted corn picker. Each row unit has a gear casing and a drive shaft extends between the two gear casings. This patent does not relate to a combine-mounted corn head and does not disclose a number of claimed elements, including the gear train for driving the entire harvesting mechanism; beam-mounted row units; row unit adjustability; individual row unit clutch protection; the enclosure of all of the harvesting unit gears within the gear casing; or the cantilevering of the row unit framework from the gear casing.

q. The Thieman patent, like Andrews, discloses a two-row, tractor-mounted corn picker. In Thieman, each row unit includes a gear housing, a drive shaft extending between the two gear housings, and a bevel gear train having an input gear attached to a part of the shaft within the housings. The gear housings of this corn picker are pivotably mounted on a beam which is supported above the tractor, and each housing contains only a pair of bevel gears whose sole function is to change the direction of drive from the drive shaft. Most of the drive gears for operating the row units are external of the gear housing and the row units are not adjustable. Among other things, there is no disclosure of a main transverse beam or of a gear train completely enclosed within a housing, no disclosure of individual row unit clutch protection, and no suggestion that the gear housing supports the row unit framework in cantilever fashion.

r. The remaining items of prior art introduced by defendant are: Ashton patent 3,520,121, Braud British patents 989,114 and 984,356; Claas patent 3,201,928; Dede patent 2,935,139; Buhr patent 2,785,555; and the IH 24 Corn Picker. Although some general testimony was received concerning some of these references, defendant presented no evidence at the trial relating any of them to the elements of the claims.

s. As the preceding findings show, there are numerous differences apparent between the claims of the patent in suit and each of the individual items of prior art. The best that can be said is that the individual elements of the claimed invention may be found in the prior art, but those elements are scattered among the various references. In addition, each reference lacks at least several of the claimed elements.

3. *COMPARISON OF PRIOR ART CITED BY THE PATENT OFFICE EXAMINER WITH PRIOR ART NOT CITED*

t. The uncited prior art introduced in evidence by IH is no better than the art which was before the Patent Examiner. All of the elements which IH selected from isolated, uncited references are also found in various of the prior art references which were cited by the Examiner.

u. The row unit clutch that defendant finds in the uncited Ariens cultivator is present in the Jones patent application. Likewise, a single main drive shaft is found in the cited Price and Jones patents, as well as the uncited Braud publications and the Argentine, Thieman, and Andrews patents. The broad concept of enclosing gears in a gear housing, for which IH relied upon the Braud publications, is well known and found in the cited Jones and Hitchcock patents. The cantilevering concept, for which IH relies primarily on Dort, is suggested by the cited Ashton patent in a context (corn heads) that is more relevant than Dort, which pertains to tractor-mounted corn pickers. Finally, the disclosure in the Schwartz patent of the main drive gear for driving the entire harvesting mechanism is no better than that taught by Jones.

v. That the art before the Patent Office in these respects is at least the equivalent of the art introduced by IH, is confirmed by the fact that at the trial, IH's expert used the uncited and cited art interchangeably in various combinations of prior art.

w. Ariens and Jones were asserted interchangeably against claim 1 for their teaching of a row unit clutch; the Dort and Argentine patents were given equal status with the cited Ashton patent for the cantilevering concept; and Braud, Schwartz, the Argentine patent, Andrews, and Thieman were each equated to the cited Jones patent for a teaching of a single main drive shaft.

x. IH presented no evidence that any of the uncited prior art that it relied upon is better than the art that was before the Patent Office.

y. The opinion of IH's expert that the Ariens cultivator is the best single reference, and that this reference by itself suggested to one of ordinary skill in the art how to design the D 40 and IH 800 corn heads, can be given no weight. He made no comparison between Ariens and any of the prior art cited by the Patent Office, and did not explain or elaborate on how Ariens suggested the design of the D 40 and IH 800 corn heads to one with ordinary skill. A production sample of the Ariens cultivator, as well as portions of production D 40 and IH 800 corn heads, were admitted in evidence and on display in the courtroom during the trial. Testimony was received in relation to all three of these machines, and the court made its own independent comparison between the Ariens cultivator on the one hand and the patented and accused corn heads on the other. IH's expert admitted, and from an independent evaluation this court finds, that Ariens is not directed to a corn harvesting mechanism; therefore, Ariens does not address the problems associated with corn harvesters, for example, powering rolls and chains through a gear train or carrying the weight of these mechanisms. The opinion of Deer's expert that one with ordinary skill in the art could not build a corn head based on the Ariens cultivator is supported factually in his testimony. He testified, and from an independent review this court finds, that the chain case in Ariens is not rigidly mounted on a transverse beam but pivoted from a shaft, and does not support a forwardly projecting rigid framework. He also testified, and this court finds, that Ariens does not have any harvesting mechanism and does not disclose the concept of driving a plurality of functional elements with a single input gear.

z. IH's answers to Deere's interrogatories Nos. 348-79 appear to concede that the Ashton and Jones patents, for

example, which were before the Patent Office, constitute art that is at least as good as the uncited art later raised by IH.

aa. The Patent Office considered the best prior art, and the presumption of validity is therefore strengthened.

4. *REASONS WHY THE EVIDENCE SHOWS THE PATENTED COMBINATION OF ELEMENTS WOULD NOT HAVE BEEN OBVIOUS TO ONE SKILLED IN THE ART*

bb. The three principal combinations of prior art asserted by IH against independent claim 1 are (a) Braud in combination with the Schwartz patent (for a main drive gear), further combined with either Ariens or the Jones patent (for a clutch); (b) the John Deere 34 in combination with the Schwartz patent (for a single drive shaft and drive gear), further in combination with a clutch; and (c) the Ashton patent in combination with either the Schwartz patent or Thieman patent (for a single drive shaft), further combined with either the Jones patent or Ariens (for a clutch).

cc. The three basic combinations of prior art applied by IH against independent claim 9 are (a) Braud in combination with one of Dort, Ashton, the John Deere 34, the IH 40, or the Argentine patent, the secondary references being alleged to provide a teaching of "cantilever" mounting; (b) the John Deere 34 in combination with either the Schwartz patent or Braud for a disclosure of a single drive shaft; and (c) Ashton in combination with any one of Braud, Schwartz, the Argentine patent, Jones, Andrews, or Thieman, the secondary art being utilized for their teaching of a single drive shaft.

dd. Other than pointing to isolated elements in individual items of prior art (for example, a drive gear in Schwartz, a single shaft in Jones, a clutch in Ariens, and cantilever

mounting in Dort), and offering the generalized opinion that it would be obvious to one of ordinary skill in the art to incorporate elements of the secondary references into the primary references, IH's expert gave no testimony or any indication as to how the modifications could be made, nor did he give any testimony as to where in the various items of prior art he found any teaching or suggestion that they could be combined as asserted. The generalized, unsupported and unexplained conclusions of IH's expert as to the obviousness of such combinations are insufficient to carry the burden of clear and convincing proof on the issue of validity.

ee. Both the primary and secondary references fail to show many of the claimed elements, and even if isolated elements identified by IH's expert in the secondary art could somehow be integrated into the teachings of the primary references, the resulting combinations (assuming their operability) would still not contain all the elements of these claims.

ff. The inventors recognized that various elements of the prior art were capable of combination in a workable machine, and nothing in the prior art taught such a capability. In addition, however, the combination led to dramatic reductions in complexity, weight, size, cost, and maintenance while facilitating row spacing adjustment and improving performance and reliability, even though the making of the invention was in conflict with the concept of the industry at the time.

gg. The elements of the combination worked together in new relationships from which the mentioned results depend. Moreover, the manner in which the elements work together is complex. For example, by eliminating under-frame braces and struts, the cantilevering of the row units from their gear housing permits both shorter row unit frames and reduction of the angle of row unit frame relative to the ground

for a low profile while still maintaining adequate underframe clearance for the stripped corn stalks and other "trash" which would otherwise tend to accumulate and thereby clog the corn head. A shorter row unit frame, in turn, results in reduction of both weight and cost of the row units. It follows that the lower weight enhanced the feasibility of cantilevering the row units in the first place.

hh. The record here shows the relationships and interdependencies of the elements and results to be clearly not obvious to persons highly skilled in the art, and fails to show that the various elements of the prior art could be combined to produce the results obtained.

ii. IH's suggested modification of Braud, in view of certain secondary references to meet the elements of claim 9, is particularly inappropriate because that modification is incompatible with the express teachings of Braud. Specifically, IH's expert testified that it would be obvious to "cantilever" the Braud row units in view of certain secondary references. The court finds that such reconstruction, even if it were physically possible, would destroy an important attribute of the Braud corn head. To "cantilever" the Braud row units from their gear cases would require rigidly fixing the gear cases to the front edge of the transverse auger trough so as to eliminate the braces, struts, and the horizontal beam supporting the row units from underneath. That modification would necessarily eliminate the row unit pivot feature of Braud and result in a monolithic assembly comprising the row units, auger trough, and feeder housing. The assembly would have to be pivoted at the connection of the feeder housing to the combine. But this would destroy the cardinal feature taught by Braud. That feature, shown in Braud British patent 989,114, is the placement of the pivot axis along the row unit drive shaft in order to minimize the mass of the structure that must be raised. IH's proposed modification of Braud would necessarily move the

pivot axis rearwardly, thereby increasing the mass to be raised and lowered, directly contrary to Braud's patented concept. Because cantilevering the Braud row units would contradict the teaching of Braud, claim 9 could not be rendered obvious thereby. Braud's teaching tends to lead away from the claimed invention rather than toward it.

jj. Deere's expert testified that he found nothing in the secondary references which would tell a person of ordinary skill in the art of corn harvesting equipment how to modify the structure of the primary references in light of the secondary references; that it would not be possible for a person of ordinary skill in the art to physically take any of the elements shown in the secondary references and use the element or elements in the structure shown in the primary references without a substantial modification; and that it would not have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of the primary and secondary references to achieve the invention claimed in the patent.

kk. Based on the court's review and comparison of the prior art, and on the extensive testimony by the experts for both parties and other technical witnesses, the court finds that, while elements of the claimed combination may be found individually in the prior art, the making of the claimed combination would not have been obvious to one with ordinary skill in the art at the time the invention was made. Indeed, the record establishes that the claimed invention was not obvious to IH's highly skilled corn harvester engineers even long *after* the invention was made.

ll. The evidentiary record contains further positive evidence that the combination claimed would not have been obvious to persons reasonably skilled in the art at the time when the invention was made. The production corn heads then in use, as exemplified by Deere and IH products,

were high profile, multidrive units which required, and employed, support means interposed below the gathering structure. The excess weight, difficulty of row-width adjustment, and the tendency to clogging were among the problems and shortcomings which were recognized to exist. In about 1967, IH inaugurated a program for the development of a new design to supplant its then production series, and to overcome the recognized problems and limitations of existing technology. In January, 1969, IH held a "brainstorming" session of its principal corn harvester engineers to discuss the known problems and to attempt to establish specifications for a new design. That meeting led only to a consensus that the problem could not be solved by a modification of existing IH designs, and that it would require redesign from the ground up if the goal was to be achieved. Through the ensuing year, continuing efforts by IH had achieved nothing of substance until IH's technical personnel became acquainted with the design features of the Deere D 40, which embodied the preferred embodiment of the claims in suit. The IH 800 design was drawn within a short period of time after the exposure of such technical personnel to the details of the D 40 design. The articulated impressions of IH's chief engineer and its most experienced corn harvester engineer of the D 40 design fortify the finding that the patented combination would not have been obvious within the intendment of the statute. The D 40 design was characterized by them as being a "new and rather radical" design and as being a "hell of a good design." Those reactions suggest that those persons, who certainly were skilled in the art, recognized the patented design as being a substantial and significant departure from the teachings of the prior art.

mm. The uncited prior art, upon which IH relies, is the equivalent of, and no better than, the prior art references

which were considered by the Patent Examiner at the time when the patent issued. IH has not sustained its burden of proving the defense of obviousness. The combination claimed in the patent would not have been obvious to persons having ordinary skill in the art at the time when the invention was made. The evidence as a whole compels a finding and conclusion that the asserted claims of the patent are valid.

nn. All findings of fact stated in the court's original decision, 460 F.Supp. 523, are reaffirmed, except to such extent as the same are supplemented by the findings of fact herein announced.

IT IS ORDERED, therefore, that judgment shall enter for Deere against IH:

[1, 2] A. Holding asserted claims 1 through 10, inclusive, 14 and 17, to be valid, and holding that claims 1 through 3, inclusive, and 6 through 9, inclusive, are infringed by the accused IH 800 corn head.

B. Permanently enjoining IH from manufacturing, using or selling any product embodying the invention claimed in the patent.

C. For its provable damages for prior infringement, including interest and costs, which said provable damages are trebled.

D. For its reasonable attorneys' fees and its costs of suit.

IT IS FURTHER ORDERED that the cause shall remain pending for subsequent determination of any issues as to the amount of damages and the amount of Deere's reasonable attorneys' fees.

In the

UNITED STATES COURT OF APPEALS

For the Seventh Circuit

No. 80-2208

DEERE & COMPANY,

Plaintiff-Appellee,

v.

INTERNATIONAL HARVESTER COMPANY,

Defendant-Appellant.

Appeal from the United States District Court for the Southern District of Illinois, Rock Island Division.
No. 76-C-20—Robert D. Morgan, *Judge.*

ARGUED APRIL 27, 1981—DECIDED JULY 29, 1981

Before SPRECHER and WOOD, *Circuit Judges,* and CAMPBELL, *Senior District Judge.**

WOOD, *Circuit Judge.* This suit for patent infringement was instituted by Deere & Company (Deere) in April, 1976, as a result of the commercial introduction by International Harvester Company (IH) of its IH 800 series corn head. Deere alleged that IH infringed its Patent No. 3,589,110 (110 Patent) issued on June 29, 1971 to Dale Schreiner and Joseph J. Shindelar and assigned to Deere.[1] The 110 Patent is embodied in the Deere 40 series corn head

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* The Honorable William J. Campbell, Senior District Judge of the Northern District of Illinois, is sitting by designation.

[1] The original suit also alleged infringement of Patent No. 3,609,948, hereafter the "Jones Patent," but this claim was later dropped.

and concerns the mounting and provision of power to devices used in harvesting corn.

International Harvester counterclaimed that the 110 Patent was invalid and a four day bench trial followed. On October 19, 1978 the district court entered judgment for Deere,[2] finding claims 1-3 and 6-9 of the 110 Patent valid and infringed.[3] Accordingly, IH was ordered to cease its production of the IH 800 and to pay treble damages and attorney's fees to Deere.

On appeal, this court reversed the judgment of the district court[4] on the basis that the trial court had not applied the requisite standards for the determination of obviousness set forth in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The district court was admonished to "articulate more adequately its rationale . . ." for its finding that the prior art relied on by IH was the equivalent of, or no better than, the prior art references that were before the patent office. This case was remanded with instructions to make detailed findings of the following:

> 1. The state of the prior art with references to each of the several old elements that were combined to constitute the invention claimed in the Deere patent.
>
> 2. With respect to each of those elements, a comparison of the "equivalent" prior art cited to the Examiner with prior art not cited.
>
> 3. The level of skill in the art.
>
> 4. The reasons why the evidence shows the patented combination of the above elements would not have been obvious to one skilled in the art.

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[2] 460 F. Supp. 523 (S.D. Ill. 1978).

[3] The court held that claims 4, 5, 10, 14 and 17 were valid but not infringed.

[4] *Deere & Co.* v. *International Harvester Co.*, No. 78-2660 (7th Cir. January 23, 1980).

Prior to this order of the court of appeals, International Harvester commenced a suit asking for a declaratory judgment that a new corn head it planned to market commercially, the CX-41, did not infringe the 110 Patent. The district court held that there was no infringement, but on appeal, this court vacated the order of the district court for lack of subject matter jurisdiction. Upon remand in this case (but before the court of appeals decision in the declaratory judgment action), IH sought to reopen the trial proceedings to admit new evidence, primarily comprised of testimony given during the declaratory judgment trial. Petitioned by IH to require the trial court to do so, the court of appeals simply noted that on remand "nothing . . . prohibits the district court from hearing new evidence if it is so inclined." The district court did not allow new evidence, but issued "Supplemental Findings and Orders" to more fully explain its original conclusions.

We are now called upon to assess the correctness of those findings of fact and conclusions of law. More specifically, IH contends that the court misinterpreted the applicable law in holding the 110 Patent infringed. In addition, IH argues that a holding of infringement would require that the patent be found invalid. In arguing for invalidity, IH insists that the district court erred in not reopening the trial for new evidence after remand. Finally, IH challenges the conclusion that it wilfully and wantonly infringed the 110 Patent and consequently seeks the elimination of the award of treble damages, attorney's fees and costs.

THE PATENT

The patent at issue involves a device commonly attached to a combine for use in harvesting corn. In order to facilitate picking corn, a number of units called corn heads

are attached to a supporting structure at intervals which correspond to the spacing of the rows of corn. The invention of the 110 Patent has to do with the mounting of the units on to the supporting structure and the provision of power to the units.

The harvester units project forward from the combine and consist of gathering chains which guide the corn stalks into a passage between the deck plates. There, the ears are snapped off and moved by gathering chains into a trough and then into the combine for husking and shelling. The stalks are pulled down through the plates and out, remaining in the field.

The 110 Patent calls for each harvesting unit to be mounted on its own enclosed gear housing. The gear train within the housing is the only mechanism used to drive the harvesting unit. The gear housings are mounted on a support beam and held by a mechanism that opens so that the housings may be repositioned along the beam if necessary to adjust the spacing. One drive shaft runs through all gear housings and provides power to them from the combine. That drive shaft is circumscribed by one main gear in each housing that is connected to the shaft by a clutch.

Deere's embodiment of the patent, the Deere 40 corn head, shows a drive shaft made in one piece. Thus, after releasing the holding mechanism, the space between row units may be adjusted by sliding the gear housing along the support beam, the drive shaft remaining intact and passing through it as the housing is moved. International Harvester's 800 series also shows a single drive shaft which spans the length of the harvester, but is segmented and rejoined by couplers so that when adjustment of spacing is necessary and the gear housings are moved along the beam, pieces corresponding to the new space between the housings must

be inserted in place of the previously used segments. In all other respects, the IH 800 corn head functions the same way as the Deere 40.

At trial, Deere contended that International Harvester's IH 800 corn head infringed all claims of the 110 Patent. International Harvester defended this charge by showing that on advice of counsel and specifically to avoid infringement, IH adopted the segmented drive shaft that had been used on previous models. Arguing that this difference was sufficient to avoid infringement, IH maintained that the "invention" of the patent is in its "self-contained adjustability" and that since the IH 800 cannot be adjusted without the use of additional parts, it does not infringe.

The difficulty the district court found with this argument is that the claims specified by the patent (and at issue here) do not speak of "self-contained adjustability."[5] In finding claims 1-3 and 6-9 infringed, the court explained that they contain no limitation of the shaft to a unitary whole. Further, the district court rejected the notion that the patent examiner's characterization of claims 1-18 in a communication to Deere requires such a limitation to be read into all claims. The communication grouped together the first eighteen claims as "drawn to a plural unit corn harvesting device, wherein the spacing between units may be varied, while maintaining the drive therefor. . . ." The district court dismissed the description as at best the preferred embodiment described in the specifications and also pointed out that the examiner did not require the limitation of the claims to the characterization.

On appeal, IH again poses this argument and adds a number of others in an effort to convince us to reverse

[5] None of the claims specifically use the language "self-contained adjustability" but the district court found that the concept is a limitation of claims not infringed.

the district court decision on infringement. Before we address them, it is important to note that our standard of review on the question of infringement is limited to a determination of whether or not the findings of the district court are clearly erroneous. Fed. R. Civ. P. 52(a); *Minnesota Mining and Manufacturing Co.* v. *Permacel-LePages, Inc.*, 334 F.2d 820, 822 (7th Cir. 1964). "If they find support in the evidence we are bound thereby and there remains but the question of whether the court applied the correct legal criteria in reaching the ultimate conclusion it did." *Wahl* v. *Carrier Manufacturing Co.*, 358 F.2d 1, 3 (7th Cir. 1966).

On this point, IH argues that this case falls within the scope of *Blonder-Tongue Laboratories, Inc.* v. *University of Illinois Foundation*, 402 U.S. 313 (1971), where the Supreme Court said that in rare instances where the trial court "wholly failed to grasp the technical subject matter and issues . . . " the judgment will be open to question. *Id.* at 333. Our review of the record and examination of the findings of the court below indicates that this is not such a case. In our review, then, we follow the dictates of *Graver Tank & Manufacturing Co.* v. *Linde Air Products Co.*, 339 U.S. 605 (1950), and defer to the trial court's more immediate and complete evaluation of the evidence so long as it is adequately supported by the record and not clearly erroneous.[6] *Id.* at 611-12.

INFRINGEMENT

International Harvester's first argument, which it contends was misunderstood by the trial court, is that since the claims call for both a drive shaft and moveable gear housings, the *cannot* be read as allowing for the addition

[6] *See also Chicago Rawhide Manufacturing Co.* v. *Crane Packing Co.*, 523 F.2d 452 (7th Cir. 1975).

of parts. Instead, IH insists, the gear housing required by the 110 Patent must be able to move with the drive shaft in place. Appellant complains that the district court looked only at whether a single unitary drive shaft was required by the claims. We think this approach was necessary to resolve the question of whether the IH 800 infringes. Reading the claims, one finds that a "main rotatable horizontal drive shaft" is required by the claims. In addition, there is a requirement that the gear housing be attached to the beam so that it is moveable. The district court resolved the question of infringement by scrutinizing IH's harvester to see if it contained both elements. Clearly, the gear housing could be moved along the beam; the question to be answered was whether any of the language describing the drive shaft would limit it in such a way as to exclude the embodiment IH chose. Thus, it had to be determined if a single, unitary piece was required by the claims. The district court found that it was not; so long as in some way both features are accomplished, the IH 800 infringes. Thus, the simple answer to IH's contentions is that in the IH 800, the gear housing is moveable and there is but one drive shaft; since there is no limitation in the 110 Patent requiring moveability to be accomplished with no additional parts, the IH 800 infringes. These are simply two different embodiments of the patented device.

It is ironic that IH urges us to note that the claims do *not* say that the drive shaft may be modified to permit adjustment when the same principle proves their argument false. The claims also do not say that the drive shaft may not be modified to permit adjustment, but is required to be one piece. The claims are not limited to either configuration and this is precisely the point.

For this reason, IH's reliance on the teachings of *Edwards* v. *Hychex Products,* 171 F.2d 259 (7th Cir. 1948),

and *Deepsouth Packing Co.* v. *Laitram Corp.*, 406 U.S. 518 (1972), is of no consequence. Both cases require that in a combination patent, all elements of a claim must be present for infringement. IH contends that by purposely omitting the feature of slideability along a unitary shaft, it avoids infringement. But this feature is *not* an element of the patent claims, it is only one way of creating the requisite drive shaft; the IH 800 features another. Thus, as required by *Edwards* and *Deepsouth*, all of the elements of the claims are present.

IH asks us to read the limitation of "self-contained adjustability" (a term which appears nowhere in the patent specifications, but which is asserted by IH to be the thrust of the invention) into the claims by virtue of the language contained in a letter from the patent office. The letter characterized all the patent claims as "drawn to a plural unit corn harvesting device, wherein the spacing between units may be varied, while maintaining the drive therefor. . . ."

The answer to this contention lies in the basic canons of construction of patents: the patent is defined by the scope of the claims. *Aro Manufacturing Co.* v. *Convertible Top Replacement Co.*, 365 U.S. 336 (1960). Where claims are ambiguous, they may be construed in light of the specifications. *N.V. Maatschappij Voor Industriele Waarden* v. *A. O. Smith Corp.*, 590 F.2d 415, 421 (2d Cir. 1978). The amount of inquiry necessary outside the claims themselves will depend on the circumstances of each case. *Eutectic Corp.* v. *Metco, Inc.*, 579 F.2d 1, 5 (2d Cir.), *cert. denied*, 439 U.S. 867 (1968). Limitations cannot be read into claims from any source. The course of prosecution in the patent office may be instructive in cases where amendments have been made eliminating or modifying claims that would have rendered the patent invalid. In such cases, the courts have looked to the "file wrapper" to determine if a patentee is

estopped from asserting a claim as part of his patent. But this is not the fact in this case. Appellant is attempting to use a description of the general nature of all eighteen claims to characterize the ones held infringed. Its value is limited at best. Where some claims are broad and others narrow, the narrow claim limitations cannot be read into the broad whether to avoid invalidity or to escape infringement. *Dennison Manufacturing Co.* v. *Ben Clements & Sons, Inc.*, 467 F. Supp. 391 (S.D.N.Y. 1979). So even if one of the eighteen claims is narrowly defined so as to preclude infringement, that limitation does not affect the remaining broader claims. We need not speculate if the patent office wished to limit all the claims to the stated language. It did not do so in the prosecution of the application. We cannot accept IH's interpretation that the letter mandated that all claims were so limited on their face.

International Harvester next asserts that Deere's admissions before the patent office with regard to its "Jones Patent" should control here because of the similarity in the patents. As the district court clearly stated, the proceedings in a different patent application have no bearing on our own. While it is true that a patentee cannot assert contradictory positions, using a restrictive interpretation to avoid invalidity and then an expansive one to assert infringement, *Devex Corp.* v. *Houdaille Industries, Inc.*, 382 F.2d 17 (7th Cir. 1967), that maxim is applicable only where the same patent is involved.

Nor does a subsequent description of the Deere 40 series corn head to the foreign patent office serve to limit the claims. The district court refused to admit such evidence as irrelevant since the statements post-dated the issuance of the patent. While there is some question as to the date of the letter vis-a-vis the issuance of the patent, the opinion relied on by the district court is helpful in any event. *Ellipse*

Corp. v. *Ford Motor Co.*, 452 F.2d 163 (7th Cir. 1971), *cert. denied*, 406 U.S. 948 (1972), not only precludes reliance on subsequent events in interpreting patent claims, but adds that "[a] patentee's interpretation under a patent may never be used to add to a patent something that was not there at the time of issuance." *Id.* at 169. IH uses this statement to distinguish our situation, but we think it is analogous. IH wishes to use the language in the letter to add to the *claims* something that was not there. The inclusion of the proffered evidence could have no effect on the clear language of the claims.

Finally, IH argues that the IH 800 does not fall within the scope of the doctrine of equivalents since it achieves adjustability in a way different from that of the 110 Patent. IH cites the following language from *Flowers v. Austin-Western Co.*, 149 F.2d 955 (7th Cir. 1945), to support its contention:

> [M]ere application of claim phraseology or a word by word correspondence is not alone enough to establish infringement, Grubman Engineering & Mfg. Co. v. Goldberger, 2 Cir., 47 F.2d 151, nor is similarity of result. Cimiotti Unhairing Co. v. American Fur Refining Co., 198 U.S. 399, 25 S.Ct. 697, 49 L.Ed. 1100. There must be real identity of means, operation, and result, Weil Pump Co. v. Chicago Pump Co., 7 Cir., 74 F.2d 13, and if one produces the same results in a different way he does not infringe. Flowers v. Magor Car Corp., 3 Cir., 65 F.2d 657.

Id. at 958. First, it is necessary to note that it is the claim and not the preferred embodiment which is to be used for comparison. IH admits that its harvester "may achieve the same general result (i.e., row adjustability) . . ." but argues that it does not have the "self-contained adjustability" required by the 110 Patent. However, the claims do not require anything more than the ability to move the gear

housings along the beam and that there be a single horizontal drive shaft. The function of the drive shaft is identical in both: it brings power from the combine to the main drive gear for each row unit. In operation, function and results, the IH 800 and the 110 Patent are the same. The IH 800 is different only from the preferred embodiment of the 110 Patent, not from the invention patented.

> To be sure, patents are not limited to the structure described for the invention may be embodied in various forms. Furthermore, except where form is of the essence of the invention, one device is an infringement of another if it performs substantially the same function in substantially the same way to obtain the same result, so that if two devices do the same work, in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form or shape, and when one has achieved something new involving invention, it is infringed when some one does the same thing in substantially the same way and thereby produces the same result . . . .

Id.

The basis for all of International Harvester's infringement arguments is that the limitation of the preferred embodiment should be read into 110 Patent claims 1-3 and 6-9. The district court, looking at the language of the claims, refused to do so. After reviewing all of the arguments posed by International Harvester, we cannot say that the district court's findings were clearly erroneous nor that the legal analyses were incorrect. IH did not avoid infringement by segmenting the drive shaft and rejoining the segments since in so doing it simply formed the same horizontal drive shaft required by the claims.

VALIDITY

In holding the 110 Patent infringed by the IH 800, we necessarily hold that the patent does not require a single

unitary drive shaft which remains in place as the gear housing is moved along the support beam to adjust row spacing. Nor does the patent require that the gear housing also slide along a stationary shaft. International Harvester strongly argues that this feature, shown in the Deere 40 embodiment, is the only real invention in the patent; without it, the 110 Patent is invalid for obviousness.

The question of validity of the 110 Patent has been addressed by the district court in two separate orders. The first was found to be inadequate in that it did not clearly apply the factors enunciated in *Graham* v. *John Deere Co.*, 383 U.S. 1 (1966). On remand, the district court accepted no new evidence but issued supplemental findings to comply with the order of this court. International Harvester asserts as error the district court's refusal to allow new evidence and insists that a new trial is required.

The district court found no reason to admit new evidence in that the directive of this court was addressed toward correcting the inadequate articulation of its conclusions. This court did not indicate that further evidence was necessary to comply with its order. In fact, when IH requested that this court direct the district court to entertain new evidence, the request was refused, this court stating only that nothing prohibited the trial judge from doing so "if it [was] so inclined." Thus, so long as the existing evidence was adequate to permit the district court to fully comply with the requisite legal analysis, there is no error in the refusal to admit further evidence.[7] *See Zenith Radio*

[7] The "new evidence" IH wishes to have admitted concerns testimony given during a subsequent action brought by IH against Deere seeking a declaratory judgment that the CX-41 corn head it proposed to manufacture did not infringe the 110 Patent. IH argues that the testimony in the CX-41 case is inconsistent with that given at trial in the case before us. As such, IH seeks to use the testimony to discredit the position of Deere in the present case which was tried before the CX-41 case. It is true that one

Corp. v. *Hazeltine Research, Inc.*, 401 U.S. 321, 331-32 (1971).

IH also objects that the supplemental findings and conclusions were adopted from those submitted by Deere. While we agree that in such cases, closer scrutiny should be used to assess their correctness, we also note that in patent cases, submissions may be especially helpful because of the technical subject matter. *Reese* v. *Elkhart Welding & Boiler Works, Inc.*, 447 F.2d 517 (7th Cir. 1971). In any event, adoption if findings submitted by parties is within the discretion of the trial court, *id.*, and there was no abuse of discretion in using the language submitted to more clearly enunciate the reasoning of the court.

Section 103 of the Patent Act states that a patent may not be granted where "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the said subject matter pertains." 35 U.S. C. § 103. The Supreme Court outlined the proper course for the determination of obviousness in *Graham* v. *John Deere Co.*, 383 U.S. 1 (1966):

> Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained;

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cannot assert a position at a subsequent proceeding which is contrary to that asserted to protect the patent earlier. *Fife Manufacturing Co.* v. *Stanford Engineering Co.*, 299 F.2d 223, 226 (7th Cir. 1962). But all this means is that Deere's position in *this* suit must remain its position in any challenges that follow. Therefore, while testimony inconsistent with that given here might have been attacked in the CX-41 case, the opposite is not true: Deere's initial position may not be invalidated by subsequent testimony. Thus, the "new evidence," if admitted, could have had no effect on the decision.

> and the level of ordinary skill in the pertinent art resolved.

Id. at 17.

Appellant IH contends that the district court did not adequately comply with *Graham* in its supplemental order. IH makes two main arguments in this respect: (1) that the court failed to adhere to the language of the claims in comparing prior art and assessing the differences and (2) that better piror art was not considered by the patent office, thus negating the statutory presumption of validity.[8]

The thrust of the first argument is that by addressing the effects created by the combination of the elements, the district court added to the claims. However, our reading of the district court's findings shows that the court considered only the claimed elements in comparing the patent to prior art as required by *Graham*. The *effects* of the combinations—vertical compactness, lateral compactness, lower profile, smaller gears, etc.—were considered only as support for a finding of nonobviousness. It is not disputed that the 110 Patent is a "combination patent," that is, a patent that is made up of known elements. Our inquiry is not into whether the patentee has created any new element, but whether the combination of elements shown would have been obvious to one skilled in the art. Evidence of the unique effects of combining these elements simply adds to the understanding of the invention as compared to those that preceded it and is helpful in making the determination of obviousness or nonobviousness.[9]

The next argument focuses on the fact that in three instances, prior art was not considered by the patent examiner

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[8] 35 U.S.C. § 282 (1952).

[9] *See* Markey, *Semantic Antics in Patent Cases*, 88 F.R.D. 103 (1981).

in the prosecution of the 110 Patent. IH argues that this negates the presumption of validity and also proves the obviousness of the 110 Patent. Our court has held that where significant prior art is not before the patent examiner in his determination of the validity of the patent, the presumption does not apply. *Republic Industries, Inc. v. Schlage Lock Co.*, 592 F.2d 963, 972 (7th Cir. 1979). However, where the prior art is equivalent to that already considered, the presumption is retained. *LaSalle Street Press, Inc. v. McCormick & Henderson, Inc.*, 445 F.2d 84, 93 (7th Cir. 1971). The district court considered the three patents and concluded that they were no better than the prior art and therefore, the presumption remained. The supplemental findings explain that since all of the elements included in the patent were already before the patent examiner, additional patents which also show some, but not all, of these elements do not help the inquiry.

The position of the district court is understandable in light of the fact that patents showing each of the elements used in the creation of the 110 Patent were before the examiner. Taking the elements individually the patents already before the patent office are as good as the three additional patents cited. However, the inquiry into obviousness requires us to determine how likely it is that one would combine all the elements. Thus, patents which show some of the elements in conjunction with others are relevant as indicators of the art leading toward the making of the combination. For this reason, we believe that the patents may not be fully equivalent to those before the examiner. The Braud publication combines the single drive shaft and enclosed gear housing; the combination of these two elements is not present in the cited patents. Dort (Patent No. 2,647,353) combines an enclosed gear housing with the concept of cantilevering the row units on the gear housing.

In addition, the single main drive gear of the Schwartz Patent (No. 3,070,939) is closer to the 110 Patent than the Jones Patent's single sprocket input.[10]

However, the effect of finding these patents not equivalent to those before the patent office would not be as conclusive as International Harvester suggests. This court in *Chicago Rawhide Manufacturing Co.* v. *Crane Packing Co.*, 523 F.2d 452 (7th Cir. 1975), *cert. denied*, 423 U.S. 1091 (1976), addressed this issue at some length. Then Circuit Judge Stevens explained:

> There are two aspects to the presumption of validity. First, as a matter of procedure, § 282 places the burden of persuasion on the party attacking the validity of the patent. This burden remains upon the alleged infringer throughout the proceeding and is in no sense dependent on the character of the proceedings before the Patent Office or the amount of prior art cited to, or considered by, the Patent Examiner. In its first aspect, the presumption is constant.
>
> There is an additional aspect to the presumption which relates to the deference due to the technical expertise possessed by the Patent Office and not generally possessed by federal judges. Notwithstanding the ex parte character of the normal Patent Office prosecution, if it appears that the prior art which is cited to establish invalidity in a judicial proceeding had already been considered by the Patent Office, the burden of overcoming the presumption of validity then rests heavily on the person attacking the patent. He must make a "clear and cogent" showing in order to prevail.
>
> The presumption, however, never becomes so strong that a patent is completely unassailable. A demonstration that the art considered by the Patent Office is the

[10] IH's argument that the Jones Patent cannot be considered as prior art because it was merely pending before the patent office is totally without merit. *See Hazeltine Research, Inc.* v. *Brenner*, 382 U.S. 252 (1965).

> same as the art considered by the court strengthens the presumption in the sense that it provides the justifiction for the requirement that invalidity be establised by clear and convincing evidence, but such a demonstration is not also a bootstrap that lifts the presumption to a still higher level.
>
> The basis for the requirement that invalidity be established by clear and convincing evidence is largely, if not wholly, dissipated when pertinent prior art is shown not to have been considered by the Patent Office. For then the Examiner's expertise may have been applied to an incomplete set of data and there can be no certainty that he would have arrived at the same conclusion in the face of the evidence and argument present to the court.

Id. at 457-58 (footnotes omitted). Thus, the result of a determination that the patent office would have been better informed had the three additional patents been before it is only a decrease in the level of proof.

Viewing all the evidence before the trial court, we cannot say that International Harvester has reached even this lower standard. Even those patents which combine elements do not lead in an obvious way to the resulting invention. Although elements of the prior art appear in a variety of ways in farm machinery, this machine combined the elements in a way that solved many of the problems existing at the time. The invention is not merely a cumulative sum of the parts but an ingenious use of ideas in a way that makes the machine a significant advance over those previously used. See *Great Atlantic & Pacific Tea Co.* v. *Supermarket Equipment Corp.*, 340 U.S. 147, 152-53 (1950); *L. E. Sauer Machine Co., Inc.* v. *Corrugated Finishing Products, Inc.*, 642 F.2d 203 (7th Cir. 1981); *Skoog* v. *McCray Refrigerator Co.*, 211 F.2d 254 (7th Cir. 1954).

The invention completely enclosed the gear housing so that all drives were kept lubricated and free from clogging.

The single drive shaft and single main drive gear permitted the size of the gears to be reduced. This in turn allowed the size and bulk of the housing to be decreased, making it narrower and lighter. Cantilevering the row units on their gear housings opened space below, eliminating the problem of trash collection on the support structure below. The entire space saving allowed for the addition of more row units, thus increasing the efficiency of the entire harvester.

In *Graham* v. *John Deere Co.*, the Supreme Court suggested that such things as commercial success, long felt but unsolved needs, and failure of others may be considered as indicia of obviousness or nonobviousness. 383 U.S. at 17-18. This court has stated that such secondary considerations may "tip the scales" in those cases.[11] *Republic*, 592 F.2d 963, 975-76; *Panduit Corp.* v. *Burndy Corp.*, 517 F.2d 535 (7th Cir.), *cert. denied*, 423 U.S. 987 (1975). The district court made findings, supported by the evidence that as a result of the combination, maintenance problems inherent in the chain and sprocket drives were eliminated. In addition, there was evidence that IH, among others, quickly applied for a license to use the 110 Patent in the manufacture of their own corn harvesters. IH subsequently withdrew its application, but created the IH 800 which contained all of the elements of the patent and all but one of the elements of the Deere 40 corn head. It is difficult to believe IH's arguments insisting on the lack of advance of the patent as construed by Deere (that is, without slideability) when it seeks so fervently to market the same invention. Furthermore, IH's failure to produce a device satisfying the demands for increased efficiency and ease in operation indicates that Deere's solution was not obvious. *Chicago Rawhide*, 523 F.2d 452, 459.

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[11] *See Novo Industrial Corp.* v. *Standard Screw Co.*, 374 F.2d 824, 828 (7th Cir.), *cert. denied*, 389 U.S. 823 (1967), (secondary considerations may serve to guard against slipping into hindsight).

We conclude that the solution to so many of the problems of earlier harvesters as embodied in the 110 Patent would not have been obvious to a hypothetical person skilled in the art having all the prior art before him. *Republic*, 592 F.2d 963, 975. Therefore, we affirm the judgment of the district court finding claims 1-3 and 6-9 of the 110 Patent valid.

TREBLE DAMAGES AND ATTORNEY FEES

In addition to its holding of infringement and validity, the district court granted Deere's request for treble damages and attorney's fees on the basis of 35 U.S.C. §§ 284 and 285. These sections have been used to compensate the prevailing party for the inequitable conduct of his opponent and thus are applicable only in unusual cases. *Apex Electric Manufacturing Co.* v. *Altorfer Bros. Co.*, 238 F.2d 867 (7th Cir. 1956). The district court based its award on the following facts: (1) after seeing the Deere 40 corn head on display, IH engineers made sketches which eventually led to the IH 800 harvester; (2) a prototype was submitted to IH patent counsel who concluded that it would infringe on the 110 Patent if it contained a unitary shaft, but would not if the shaft was segmented; (3) the latter form was adopted and initially promoted using a film which attested to its ability to be adjusted by simply sliding the row units. This film was recalled for corrections after several memoranda noted the problem, one of which stated that the passage in the film would be fatal to IH in winning this suit.

Section 284 allows the court to increase the damage award up to three times actual damages.[12] The language of the

[12] 35 U.S.C. § 284 provides in pertinent part: When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed.

statute gives no guidance in its application, but the section has been interpreted by the courts to apply only in cases of bad faith where conscious and wilful infringement are found. *See e.g., Union Carbide Corp.* v. *Graver Tank & Manufacturing Co.*, 282 F.2d 653, 660 (7th Cir. 1960), *cert. denied*, 365 U.S. 812 (1961). Thus, in cases where the issues are close and fairly debatable and are litigated in good faith, treble damages should not be awarded. *Wahl* v. *Carrier Manufacturing Co.*, 511 F.2d 209, 214 (7th Cir. 1975).

Appellant argues that the district court's findings do not amount to a showing of bad faith or wilful and wanton conduct as required by case law. As support, IH cites our decision in *Blake* v. *Bassick Co.*, 392 F.2d 879, 883 (7th Cir.), *cert. denied*, 393 U.S. 828 (1968), where an award of treble damages was found unwarranted in circumstances very similar to our own. There, an original attempt to obtain a license was abandoned in favor of production of a device specifically modified to avoid infringement. *Id.* at 883-84. IH also points to *Continental Can Co.* v. *Anchor Hocking Glass Corp.*, 362 F.2d 123 (7th Cir. 1966), where this court reiterated its position that a defendant's action in seeking the advice of counsel gives rise to an inference of good faith. *Id.* at 129.

In *Milgo Electronic Corp.* v. *United Business Communications, Inc.*, 623 F.2d 645 (10th Cir.), *cert. denied*, 101 S.Ct. 794 (1980), the Tenth Circuit considered the question of whether a defendant's actions in copying a design before a patent was issued (and where no indication of a pending application was present) amounted to wilfulness which would trigger the award of increased damages under § 284. Although in that case the court found the award warranted, the crucial factor in that determination was that no effort was made to secure an opinion of counsel. The court distinguished the Seventh Circuit decision in *Union Carbide*

Corp. v. *Graver Tank & Manufacturing Co.*, 282 F.2d 653, saying that once the defendant had actual notice of plaintiff's patent rights, it "was under an affirmative duty to exercise due care to determine whether or not it was infringing [plaintiff's] patents." 623 F.2d at 666.

In light of the above cited cases, we believe that the district court was in error in awarding treble damages in this case. Examination of the design before issuance of the patent was clearly permissible, and the actions of IH subsequent to the patent grant are inconsistent with the requisite finding of bad faith. IH consulted its in-house counsel at the planning stage of the new harvester and, having received an opinion as to the appropriate design to avoid infringement, adopted that design. Prior to production, IH again had its patent attorney assess whether the prototype would infringe and relied on the conclusion that it did not. While this does not negate liability for infringement, it does negate an inference of wilful and wanton infringement.

Deere makes much of the fact that a promotional film distributed by IH touted its product as capable of adjustment by simply sliding the row units. IH withdrew this film after an IH engineer noticed the improper implication that no additional adjustment need be made to slide the units. A memo concerning that deleted language stated that it would be all Deere would need to win the case. Deere uses this memo to show that IH knew it was infringing the 110 Patent claims; the district court apparently accepted this view.

We think that since the machine being promoted by the film did *not* have the capability implied, the immediate effort to stop distribution of the film is understandable, not because it would somehow lead to adverse results in the patent infringement suit but because it would mislead

potential purchasers. The memorandum may show a lack of understanding of the IH product's capabilities, but it certainly does not prove that IH purposely infringed the Deere patent.

With this in mind, and in view of the difficulty in assessing the extent of the claims and the question of validity where the scope of the patent is unclear, we cannot say that the evidence amounted to a showing of deliberate infringement. An award of increased damages is within the discretion of the trial judge and may only be reversed where there is an abuse of discretion. *Leesona Corp.* v. *United States*, 599 F.2d 958, 969 (Ct. Cl.), *cert. denied*, 444 U.S. 991 (1979). In this instance, we feel that reversal is necessary since the standards for an increased damage award were not met.

Nor can we say that an award of attorney's fees is merited in this case. Section 285 provides that an award of attorney's fees may be made in exceptional cases.[13] The purpose of the award is to prevent the gross injustice of having a prevailing party bear the cost of litigation in a suit where the conduct of the losing party is clearly inequitable. *Stanford Research Co.* v. *Eberhard Faber Pen and Pencil Co.*, 379 F.2d 512 (7th Cir. 1967). This court has interpreted the statutory language to require "an unambiguous showing of extraordinary misconduct." *Airtex Corp.* v. *Shelley Radiant Ceiling Co.*, 536 F.2d 145, 155 (7th Cir. 1976). Examples of conduct held to be extraordinary include repeated failure to respond to discovery requests, *L. F. Strassheim Co.* v. *Gold Medal Folding Furniture Co.*, 477 F.2d 818 (7th Cir. 1973), fraud on the patent office, *Shelco, Inc.* v. *Dow Chemical Co.*, 466 F.2d 613 (7th Cir.), *cert. denied*, 409 U.S. 879 (1972), and unclean hands

[13] 35 U.S.C. § 285 provides: The court in exceptional cases may award reasonable attorney fees to the prevailing party.

in obtaining the patent, *Timely Products Corp.* v. *Arron*, 523 F.2d 288 (2d Cir. 1975). IH's conduct in attempting to avoid infringement by modification of its prototype and defending the subsequent suit is nothing if not the "ordinary" patent case. No evidence of bad faith conduct has been shown. The award of attorney's fees is not supported by the evidence and must be reversed.

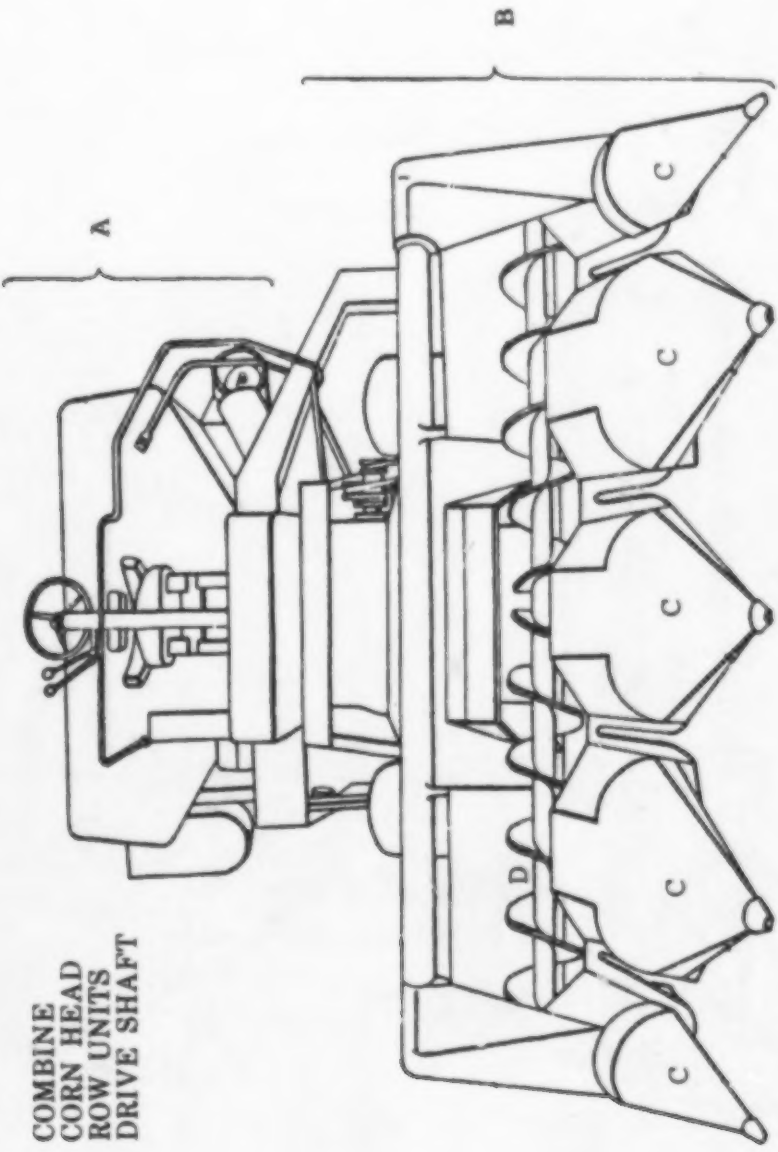
CONCLUSION

We have considered all of the parties' contentions and the authorities they relied on in making their arguments in this appeal. Although we have not commented on all the issues raised, they have been given consideration in the disposition of this case.

The judgment of the district court is affirmed as to the issues of infringement and validity and reversed as to the award of treble damages and attorney's fees to Deere.

No. 80-2208

EXHIBITS



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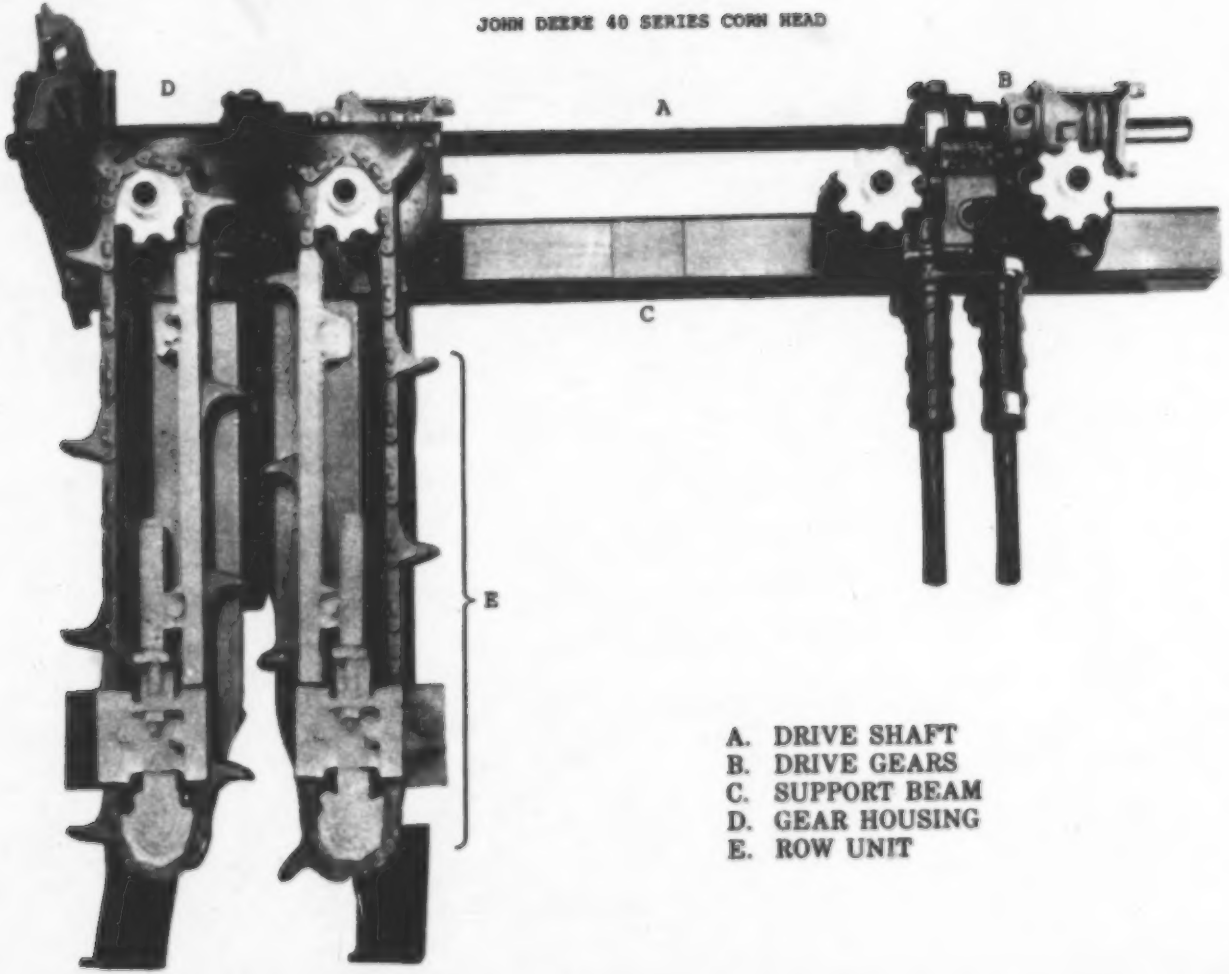
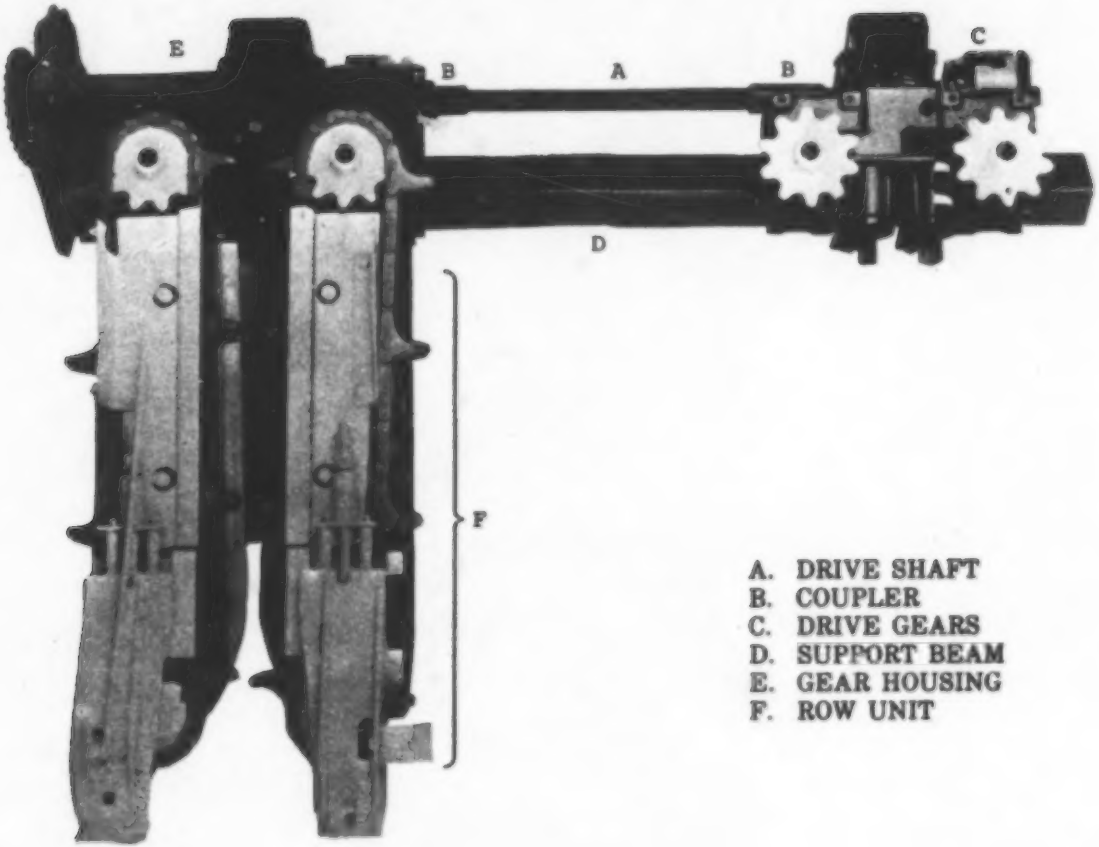
B. CORN HEAD
C. ROW UNITS
D. DRIVE SHAFT

JOHN DEERE 40 SERIES CORN HEAD



A. DRIVE SHAFT
B. DRIVE GEARS
C. SUPPORT BEAM
D. GEAR HOUSING
E. ROW UNIT

INTERNATIONAL HARVESTER 800 SERIES CORN HEAD



A. DRIVE SHAFT
B. COUPLER
C. DRIVE GEARS
D. SUPPORT BEAM
E. GEAR HOUSING
F. ROW UNIT

No. 80-2208

A true Copy:

Teste:

Clerk of the United States Court of Appeals for the Seventh Circuit

United States Court of Appeals
For the Seventh Circuit
Chicago, Illinois 60604

July 29, 1981

Before
Hon. ROBERT A. SPRECHER, Circuit Judge
Hon. HARLINGTON WOOD, JR., Circuit Judge
Hon. WILLIAM J. CAMPBELL, Senior District Judge*

No. 80-2208

DEERE & COMPANY, *Plaintiff-Appellee,* vs. INTERNATIONAL HARVESTER COMPANY, *Defendant-Appellant.*	Appeal from the United States District Court for the Southern District of Illinois, Rock Island. No. 76-C-20 Judge Robert D. Morgan

This cause was heard on the record from the United States District Court for the Southern District of Illinois, Rock Island Division, and was argued by counsel.

On consideration whereof, IT IS ORDERED AND ADJUDGED by this Court that the judgment of the said District Court in this cause appealed from be, and the same is hereby AFFIRMED as to the issues of infringement and validity, and REVERSED as to the award of treble dam-

* The Honorable William J. Campbell, Senior District Judge of the Northern District of Illinois, is sitting by designation.

ages and attorney's fees to Deere, in accordance with the opinion of this Court filed this date. Each party is to bear its own costs on appeal.

1. U.S. CONST. art. I, § 8, cl. 8:

The Congress shall have Power . . .

To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries

2. 35 U.S.C. § 103:

§ 103. Conditions for patentability; non-obvious subject matter.

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Opposition

Office - Supreme Court, U.S.
FILED
SEP 29 1981
ALEXANDER L. STEVAS,
CLERK

No. 81-498

IN THE

Supreme Court of the United States

October Term, 1981

INTERNATIONAL HARVESTER COMPANY,

Petitioner,

vs.

DEERE & COMPANY,

Respondent.

RESPONDENT'S BRIEF IN OPPOSITION TO PETITION FOR A WRIT OF CERTIORARI.

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RESPONDENT'S BRIEF IN OPPOSITION TO PETITION FOR A WRIT OF CERTIORARI.

INTRODUCTION.

This case involves a patent that has been held valid and enforceable against petitioner, International Harvester Company ("IH"), in two decisions of the District Court and by a unanimous Court of Appeals. IH presents no special or important reasons for this Court to review these decisions.

The conclusion that the invention would not have been obvious under 35 U.S.C. §103 was reached by a proper application of the principles laid down by this Court in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). Moreover, both courts went a step further and specifically determined, consistent with and relying upon *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152 (1950) ("*A & P*"), that the elements of the

invention produce in combination an effect that exceeds the sum of the effects of the elements taken separately, that is, a "synergistic" effect. Synergism having been found to exist, the question posed by IH — whether synergism is the *sine qua non* of the patentability of a combination of old elements — is not presented by this case.

CORRECTED STATEMENT OF THE CASE.

Since the facts have been meticulously dealt with below, there is no need to summarize them here. Suffice it to say that both the District Court and the Court of Appeals correctly perceived the invention as an important contribution to the mechanical corn harvester art. The facts fully support that conclusion.

In an effort to manufacture a question falling within Supreme Court Rule 17, IH has misquoted the decision of the Circuit Court. IH states that the Court "held that the standard of patentable invention applicable to a combination of old elements is met if the combination is an 'ingenious use of ideas in a way that makes the machine a significant advance over those previously used' " (Petition p. 2) and contends that the phrase quoted from the opinion shows the Appellate Court to have "radically departed" from *A & P* (Petition pp. 3-4). The contention, based on a phrase taken out of context, is unfounded. What the Court of Appeals actually said is this:

> "*The invention is not merely a cumulative sum of the parts* but an ingenious use of ideas in a way that makes the machine a significant advance over those previously used. See *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152-53 (1950); . . . ." (A. 70). [Emphasis supplied].

Thus, contrary to IH's contention, the Appellate Court explicitly followed *A & P* and found synergism to be present.

The Court of Appeals' determination that the invention meets the *A & P* "standard" moreover manifests approval of the District Court's finding that:

> "The asserted claims do produce a synergistic effect through the combination of their elements. . . . [S]ynergistic effect is achieved by reason of the fact that old elements were combined in a manner which had the effect of rewriting the book on the prior art. The gear housing is, at once, the lubricated environment for the gear train, the whole support for the row unit which extends forwardly therefrom, and it provides the sole support for the row unit as a part of the integrated corn head. The combined effect is the creation of a totally new concept. The effect was to avoid trusses or other supporting means for the row unit and to achieve lateral and vertical compactness of the unit itself". (A. 20-21).[1]

Thus, the Courts below concurred that the invention produces a synergistic effect and IH's characterization of the Court of Appeals' opinion as a departure from this Court's decisions is incorrect.

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[1]It is noteworthy that while today IH champions synergism as the *sine qua non* of patentability, it argued precisely the opposite before the Seventh Circuit, namely, that the District Court erred for having looked to synergism ("Brief for Defendant-Appellant" in Appeal No. 80-2208, p. 58, copy appended hereto).

REASONS FOR DENYING THE WRIT.

The ruling of the Court of Appeals in this case is fully consistent with this Court's opinions in both *Graham* and *A & P*. Contrary to IH's first argument (Petition pp. 3-4), therefore, the Seventh Circuit neither rejected the decisions of this Court nor created any new test or standard of patentability. Whatever merit there may be in IH's second argument (Petition p. 5) that a conflict exists between certain decisions respecting the standard of patentability to be applied to "combination" patents, this case does not reflect that conflict and therefore is not a proper vehicle for resolving it. Finally, for the reasons already stated, IH's third argument (Petition p. 6) — that this is an "ideal" case for the review sought — is similarly misplaced. In sum, all of IH's arguments are overridden and made irrelevant by the controlling fact that the Court of Appeals applied the criteria of both *Graham* and *A & P*.

CONCLUSION.

IH's entire petition is based on a representation that the Seventh Circuit ignored *A & P*. Nothing could be further from the truth. Neither Court below stopped at the *Graham* analysis but went on to consider the invention from the perspective of *A & P* as well.

The petition, viewed in context, poses neither the question IH says it does nor any other worthy of the Court's consideration. Certiorari, therefore, should be denied.

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APPENDIX.

Excerpt from "Brief for Defendant-Appellant" in Appeal No. 80-2208, p. 58.

* * *

4. The District Court Erroneously Looked To The Obviousness Or Non-Obviousness Of The Effect Of The Combination, Rather Than Of The Making Of The Combination

The District Court held with respect to the claimed invention that: "The combined *effect* is the creation of a totally new concept. The *effect* was . . ." (A. 13). In looking exclusively to the *effect* of the combination, rather than to the obviousness of making the combination, the District Court committed clear error. Indeed, it was for this reason that "synergism" was held to be inconsistent with the "*Graham* mandate to apply Section 103.", *Republic Industries, Inc. v. Schlage Lock Co., supra* at 971.

* * *